



# **INTERNATIONAL SOYBEAN VARIETY EXPERIMENT**

**THIRD REPORT OF RESULTS  
1975**

**D.K. Whigham and W.H. Judy**




International Soybean Program

**INTSOY**

**International Agricultural Publications  
INTSOY Series Number 15**

**COLLEGE OF AGRICULTURE  
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN**





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D. K. WHIGHAM and W. H. JUDY

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August 1978

Single copies of this publication may be obtained by writing to INTSOY at the following address:

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Library of Congress Catalog Card Number 78-61838

Support for the research reported and the preparation of this publication was provided by the United States Agency for International Development under Contract Number AID/CM/ta/c-73-19, Contract Number AID/TA/C-1294, and 211 (d) Grant AID/CM/ta-g-73-49, and by the Illinois Agricultural Experiment Station, College of Agriculture, University of Illinois at Urbana-Champaign.



## CONTENTS

FOREWORD	ix
INTRODUCTION	1
MATERIALS AND METHODS	1
MAP OF WORLD-WIDE DISTRIBUTION OF TRIALS	4
RESULTS AND DISCUSSION	5
SUMMARY	16
PEDIGREE OF SOYBEAN CULTIVARS	18
DESCRIPTION OF ENVIRONMENTAL ZONES	19
GEOGRAPHICAL DESCRIPTION OF TRIAL SITES	20
LIST OF COOPERATORS	23
AGRONOMIC DATA FOR ENVIRONMENTAL ZONES	
Yield for Zones I, II, and IV	33
Rank by Yield for Zones I, II, and IV	34
Yield for Zones III and VII	34
Rank by Yield for Zones III and VII	35
Yield for Zone X	35
Rank by Yield for Zone X	36
Two Year Agronomic Data for Zone I	37
Two Year Agronomic Data for Zone IV	38
Two Year Agronomic Data for Zone VII	39
Days to Flower for Zones I, II, and IV	40
Days to Flower for Zones III and VII	41
Days to Flower for Zone X	41
Days to Harvest for Zones I, II, and IV	42
Days to Harvest for Zones III and VII	42
Days to Harvest for Zone X	43
Plant Height for Zones I, II, and IV	43
Plant Height for Zones III and VII	44
Plant Height for Zone X	44
Lodging Score for Zones I, II, and IV	45
Lodging Score for Zones III and VII	46
Lodging Score for Zone X	46
Shattering Score for Zones I, II, and IV	47
Shattering Score for Zones III and VII	48
Shattering Score for Zone X	48
Seed Weight for Zones I, II, and IV	49
Seed Weight for Zones III and VII	49

## AGRONOMIC DATA FOR ENVIRONMENTAL ZONES (Continued)

Seed Weight for Zone X	50
Seed Quality Score for Zones I, II, and IV	51
Seed Quality Score for Zones III and VII	52
Seed Quality Score for Zone X	53

## PROTEIN AND OIL ANALYSES FOR ENVIRONMENTAL ZONES

Protein and Oil Content for Zones I, II, and IV	54
Protein and Oil Content for Zones III, V, and VI	55
Protein and Oil Content for alternate varieties in Zone III	56
Protein and Oil Content for Zones VII, VIII, and IX	57
Protein and Oil Content for Zones X, XI, and XII	58
Protein and Oil Content for Zone XIII	59

## COMBINED ANALYSES OF AGRONOMIC DATA FOR ENVIRONMENTAL ZONES AND SELECTED GEOGRAPHICAL AREAS

Zone I - All Sites	60
Zone I - Sri Lanka Sites	62
Zone I - African Sites	64
Zone I - Asian Sites	66
Zone I - South American Sites	68
Zone II - All Sites	70
Zone III - All Sites	72
Zone IV - All Sites	74
Zone IV - African Sites	76
Zone IV - Central and South American Sites	78
Zone VII - All Sites	80
Zone X - All Sites	82

## AGRONOMIC DATA FOR INDIVIDUAL SITES, BY REGION

### *Africa*

Algeria, Khemis-Miliana	84
Burundi, Bujumbura	86
Burundi, Mosso	88
Cameroon, Wum	90
Congo, Lekana	92
Dahomey, Parakou	94
Egypt, Bahteem	96
Egypt, Seds	98
Ethiopia, Arussie Negellie	100
Ethiopia, Bako	102
Ethiopia, Debre Zeit	104
Ethiopia, Dembere Kella	106
Ethiopia, Jimma	108
Gambia, Yundum	110
Ghana, Legon Farm	112
Ivory Coast, Abidjan	114



# AGRONOMIC DATA FOR INDIVIDUAL SITES, BY REGION

## *Africa (Continued)*

Ivory Coast, Badikaha	116
Ivory Coast, Dekokaha	118
Ivory Coast, Gagnoa	120
Ivory Coast, Odienne	122
Ivory Coast, Sirasso	124
Ivory Coast, Sequela	126
Lesotho, Mejametalana	128
Mali, Koulikoro	130
Mali, Sikasso	132
Mauritius, Pamplémousses	134
Mauritius, Reduit	136
Niger, Gaya	138
Niger, Maradi	140
Reunion, St. Denis	142
Reunion, St. Denis	144
Reunion, St. Pierre	146
Rhodesia, Salisbury	148
Rwanda, Karama	150
Rwanda, Rubona	152
Senegal, Sefa	154
Sierra Leone, Njala	156
Swaziland, Bigbend	158
Swaziland, Malkerns	160
Swaziland, Malkerns	162
Tanzania, Ilonga	164
Tanzania, Lyamungu	166
Tanzania, Mbeya	168
Tanzania, Ukiriguru	170
Togo, Amoutchou	172
Togo, Davie	174
Togo, Kitangbao	176
Upper Volta, Bobo-Dioulasso	178
Upper Volta, Farako-Ba	180
Upper Volta, Saria	182
Zambia, Magoye	184
Zambia, Mufulira	186

## *Asia*

Afghanistan, Herat	188
Afghanistan, Kundoze	190
Afghanistan, Mazar-I-Sharif	192
Bangladesh, Joydevpur	194
India, Jabalpur	196
Indonesia, Bogor	198
Indonesia, Kebun Jeruk	200

# AGRONOMIC DATA FOR INDIVIDUAL SITES, BY REGION

## *Asia (Continued)*

Korea, Jeju	202
Korea, Suweon	204
Korea, Suweon	206
Korea, Suweon	208
Nepal, Khumaltar	210
Pakistan, Islamabad	212
Pakistan, Lahore	214
Pakistan, Lyallpur	216
Pakistan, Rawalpindi	218
Pakistan, Swat	220
Pakistan, Tandojam	222
Pakistan, Tandojam	224
Philippines, La Carlota	226
Philippines, La Carlota	228
Philippines, Los Banos	230
Sri Lanka, Alutharama	232
Sri Lanka, Alutharama	234
Sri Lanka, Angunukolapalessa	236
Sri Lanka, Gannoruwa	238
Sri Lanka, Gannoruwa	240
Sri Lanka, Kilinochchi	242
Sri Lanka, Maha Illuppallama	244
Sri Lanka, Moneragala	246
Sri Lanka, Puttalam	248
Sri Lanka, Ratimalagara	250
Sri Lanka, Thirunelvely	252
Sri Lanka, Thirunelvely	254
Taiwan, Shanhua	256
Thailand, Khon Kaen	258
Thailand, Surat Thani	260
Thailand, Suwan Farm	262

## *Europe*

Hungary, Godollo	264
Italy, Sassari, Sardinia	266
Spain, Madrid	268
Yugoslavia, Novi Sad	270

## *Mesoamerica*

Bahamas, San Andros	272
Belize, Central Farm	274
Costa Rica, Canas	276
Costa Rica, Guanacasta	278
Honduras, La Lima	280
Jamaica, Caymanas	282



# AGRONOMIC DATA FOR INDIVIDUAL SITES, BY REGION

## *Mesoamerica (Continued)*

Martinique, Le Lamentin	284
Nicaragua, Managua	286
Nicaragua, Nagarote	288
Nicaragua, Posoltega	290
Panama, Chichebre	292
Panama, Rio Hato	294
Trinidad & Tobago, Port-of-Spain	296

## *Middle East*

Iran, Karaj	298
Iran, Rezaiyeh	300
Israel, Bet-Dagan	302
Jordan, Wadi Dulail	304
Lebanon, Beqa'a	306
Saudi Arabia, Al-Hassa	308
Saudi Arabia, Wadi Jizan	310

## *North America*

United States, Urbana, Illinois	312
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## *Oceania*

Fiji, Legalega	314
Fiji, Seaqaqa	316
Tahiti, Papeete	318

## *South America*

Argentina, Parana	320
Bolivia, Abapo-Izozog	322
Bolivia, Palometillas	324
Bolivia, Santa Cruz	326
Bolivia, Santa Cruz	328
Brazil, Manaus	330
Chile, La Platina	332
Colombia, Espinal Tolima	334
Colombia, Motilonia	336
Colombia, Turipana	338
Ecuador, Boliche	340
Ecuador, Pallatanga	342
Ecuador, Pichilingue	344
Ecuador, Portoviejo	346
French Guiana, Cabassou	348
Guyana, Enmore	350
Guyana, Enmore	352

## AGRONOMIC DATA FOR INDIVIDUAL SITES, BY REGION

### *South America (Continued)*

Guyana, La Bonne Intention	354
Guyana, Mon Repos	356
Peru, Chiclayo	358
Peru, El Porvenir	360
Peru, El Porvenir	362
Peru, Piura	364
Peru, Tingo Maria	366
Venezuela, Maracay	368



## FOREWORD

We are pleased to add the Third Report of Results of the International Soybean Variety Experiment (ISVEX) to the INTSOY Publication Series. The first and second reports are numbers 8 and 11 in the Series, respectively.

INTSOY was established at the University of Illinois and University of Puerto Rico to give leadership within a network of national and international organizations for soybean research and educational work. The objective of this program is to expand the use of soybeans for human food. The geographic orientation is toward tropical and sub-tropical areas of the world where protein-calorie malnutrition problems tend to be concentrated. However, the perspective is world-wide.

ISVEX was initiated in 1973 as the first part of a genetic improvement program. The objectives are to evaluate soybean cultivars (varieties) for wide environmental adaptability and to provide countries with improved cultivars for introduction or for breeding programs. Another important dividend has been the accumulation of more knowledge about the response of soybeans to different skills in management and to various temperatures and daylength environments. With the cumulative results from more growing seasons, the purposes for this trial are being attained. The importance of careful cultivar selection and improved management during production and harvesting is clearly demonstrated.

ISVEX is one phase of INTSOY's genetic improvement program. The Soybean Preliminary Observation Trial (SPOT) was organized in 1975 to provide the environmental response of newly-developed cultivars at a limited number of sites. These cultivars are obtained from selections in the INTSOY breeding program in Puerto Rico and from programs of cooperators at various international sites. Selections are made from SPOT for inclusion in ISVEX. A new trial was organized in 1978 to tap the pool of germplasm being developed in country programs throughout the world--the Soybean International Experiment Variety Evaluation (SIEVE). Selections from SIEVE are entered into the SPOT trials.

A world-wide variety testing program such as ISVEX requires the cooperation and resources of many organizations and individuals. Foremost in importance are those cooperators who conduct the trials. They record data and send it to INTSOY for analysis. The United States Agency for International Development has provided the general program resources to make ISVEX possible. The Food and Agriculture Organization of the United Nations has provided technical supervision and assistance in sending seed to a number of countries. Other international organizations have provided support, especially the United Nations Development Program. The many services of the Statistical Laboratory of the Department of Agronomy, University of Illinois at Urbana-Champaign, are gratefully acknowledged.

Leadership in organizing ISVEX was provided by D. Keith Whigham with the assistance of Robert Dunker. William H. Judy has ably succeeded Dr. Whigham and is giving leadership to ISVEX with the efficient assistance of Henry J. Hill. The sincere appreciation of all in the INTSOY network is expressed to the many who have made the variety testing program and the results reported in this publication possible.

William N. Thompson  
Director  
International Soybean Program (INTSOY) .



## INTERNATIONAL SOYBEAN VARIETY EXPERIMENT THIRD REPORT OF RESULTS

This publication is the third report of results from the International Soybean Variety Evaluation Experiment (ISVEX), organized in 1973 by the International Soybean Program (INTSOY) at the University of Illinois, under a contract with the Agency for International Development, U. S. Department of State.

ISVEX was designed to meet the following objectives:

1. To test the adaptation of soybean cultivars (varieties) under a wide range of environmental conditions
2. To provide research workers with an opportunity to compare local and introduced cultivars
3. To provide a source of new germplasm, which a cooperator may use directly or incorporate into his breeding program
4. To identify areas of the world that have a potential for soybean production
5. To evaluate the response of the soybean to different environments.

### MATERIALS AND METHODS

#### Procedures

Instructions for management and data collection for ISVEX were sent with the seed shipment to each cooperator. Soybean seed for planting was provided to each cooperator in individual row packages. Granular inoculant was provided for distribution in the row with the seed prior to covering the seed with soil. The experiment was designed as a randomized complete block with four replications. Each variety was planted once in each block in a plot which consisted of four rows 5 m long and 60 cm apart. All observations, including the grain yield, were obtained from the two center rows.

It was suggested in the instructions that a trial site be chosen which had an identical crop history and where the soil was well drained. A soil analysis was recommended for determination of pH, organic matter, nitrogen, phosphorus, and potassium. A P fertility level of 35 kg/ha and a K level of 66 kg/ha was recommended. The pH level was recommended to be adjusted between 6.0 and 7.0.

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Sufficient seed was provided to overplant approximately 50%. It was recommended that the plants be thinned soon after emergence to a stand of one plant per 5 cm.

The method of weed control suggested was mechanical or chemical according to the facilities available to the cooperator.

Chemicals were recommended for control of insects.

### Cultivars

The soybean cultivars tested in the third ISVEX during 1975 and early 1976 are listed in Table 1. The pedigree and maturity group of each cultivar are shown in the same table. The cultivars were selected for their consistent high yield performance for several years in the U. S. Department of Agriculture Regional Soybean Trials which originate in Urbana, Illinois and Stoneville, Mississippi. The entries were selected from U. S. cultivars in order to provide access to adequate quantities of high quality seed. Certified or foundation seed was purchased from sources in the areas of the United States where each variety was grown. At least one cultivar from each of the maturity groups 00 through IX was selected. Twelve cultivars were retained from the second ISVEX<sup>1/</sup> and 13 new cultivars were added. The new entries included Cobb, Columbus, Woodworth, Amsoy 71, Hark, Beeson, Corsoy, Wells, Hodgson, Swift, Pickett 71, Bonus, and Altona. The 25 varieties were divided into early and late trials as shown in Table 1. The late trial was planted in environmental zones I - VIII, and the early trial was planted in zones IX - XIII.

In the instructions for the ISVEX trial, it was suggested that the cooperator might wish to substitute one or two local soybean cultivars for those which were supplied by INTSOY. Many cooperators did substitute and the data on the performance of these substituted cultivars may be seen in the report of the analysis of data.

### Experiment Sites

The experiment sites were divided into environmental zones which were defined according to latitude and altitude. Separating the trial sites according to latitude permits evaluation of cultivars under similar conditions of day length. Separation according to altitude permits evaluation of cultivars under similar conditions of day- and night-time temperatures. There was some variation within each zone for temperature, moisture and radiation. The limits of each of the 13 zones and the number of sites are shown in Table 2. The trials were separated into groups within each 10° latitude from the equator and three altitude ranges divided 0-500 m, 501-1000 m, and above 1000 m.

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<sup>1/</sup>Whigham, D. K., "International Soybean Variety Experiments - Second Report of Results" INTSOY Series No. 11, University of Illinois at Urbana-Champaign, 1976, 221p.



The environment dictated the optimum planting time for each site. Plantings were made throughout the year. The first planting was made on 6 January 1975 and the last on 5 April 1976. The trial was planted at several sites during more than one season of the year.

The third ISVEX was requested by 259 sites in 90 countries. Useful data were returned from 104 sites in 55 countries which are listed in Table 3. Figure 1 shows the locations of the countries. The experiment was tested under a wide range of environmental conditions represented by the range in latitude of 34° south in Chile to 47° north in Hungary and by altitudes from -2 m in Guyana to 1960 m in Ethiopia. However, 102 sites were located within 20° of the equator and at altitudes lower than 500 m.

A complete list of cooperators and their addresses is included in Table 4.

#### Data Collected

Data were reported for each plot by cooperators as follows:

*Yield:* Weight in grams of clean, dry grain from 5 m of the two center rows which is a harvest area of 6 m<sup>2</sup>.

*Days to flower:* Days from date of emergence to date when 50% of the plants have flowered.

*Days to maturity:* Days from date of emergence to date when 95% of the pods are ripe.

*Nodule number:* The number of nodules on the root system at the time when the first flowers appear and a second count of nodules three weeks after date of first flowering.

*Nodule dry weight:* Dry weight in grams of the nodules associated with the root system at the time first flowers appear and again three weeks after first flowering.

*Plant height at maturity:* Height in centimeters from the ground surface to the top of the main stem at maturity.

*Lodging score:* Estimated rating of lodged or down plants on a scale of 1 (all erect) to 5 (all down) as observed at time of maturity.

*Shattering score:* Estimated rating of the amount of shattering of seed from the pods on a scale of 1 (no seed shattered) to 5 (over 50% shattered) at the time of maturity.

*Plants harvested:* Total number of plants harvested from the two center rows of each plot.

*Pods per plant:* Average number of pods per plant at time of harvest.

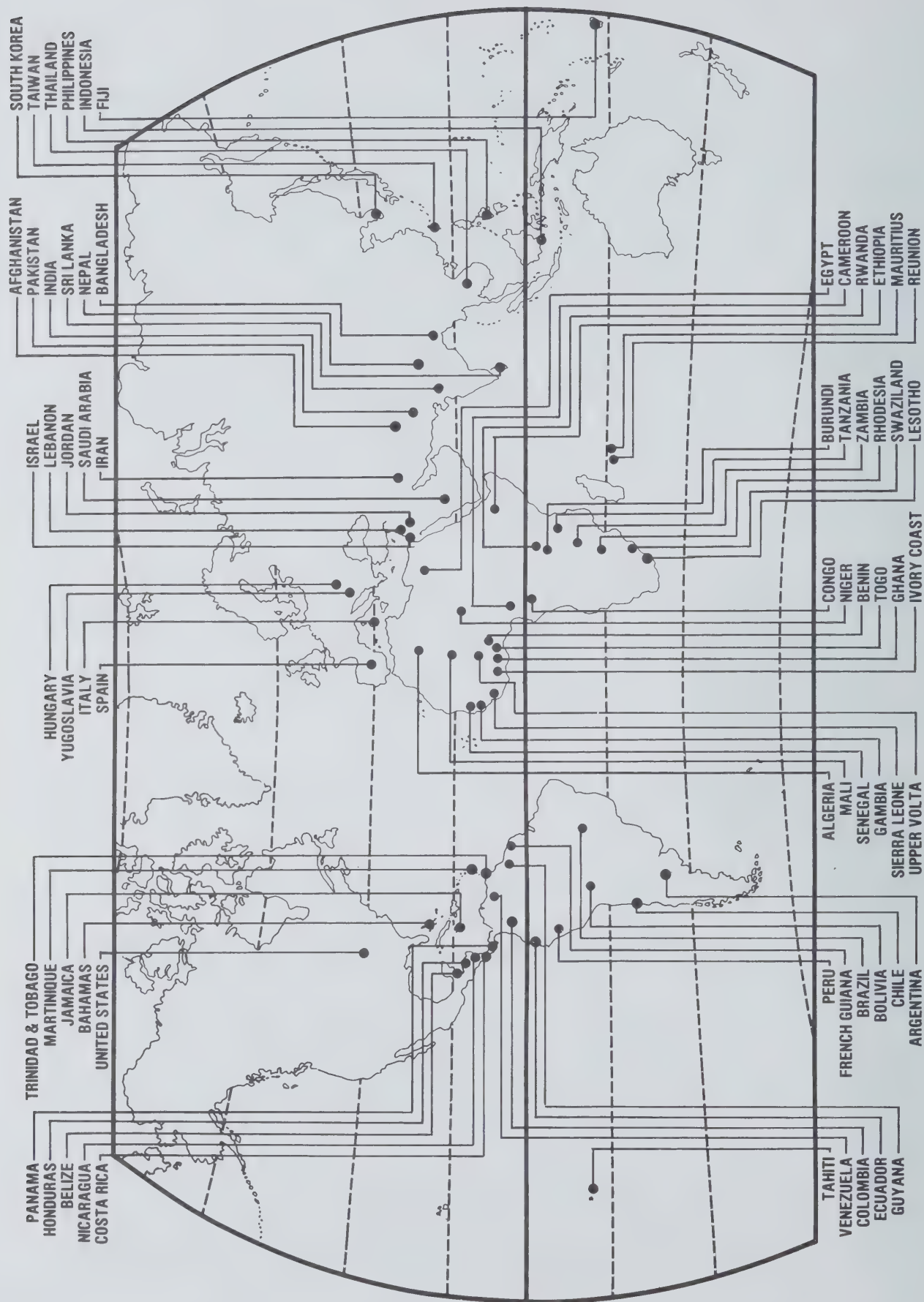


Figure 1. Countries from which data were collected in the third International Soybean Variety Evaluation Experiment.



*Seed weight:* Weight in grams of 100 randomly selected seeds from the dried, cleaned grain.

*Quality of seed:* Estimated rating of seed quality after harvest considering the amount of wrinkling, defective seed coats, off-color seed, and moldy or rotten seed according to a scale of 1 (very good quality) to 5 (very poor quality).

*Disease rating:* Estimated rating of the severity of the three most serious diseases attacking soybeans in the trial according to a rating scale of 1 (highly resistant) to 5 (leaves covered with disease).

### Statistical Analysis of Data

Analysis of variance was completed for variables for which data were reported from more than one replication of the trial at each site during the same season. Means, standard error of a cultivar mean, coefficient of variation, and the least significant difference (LSD) of cultivar means at the 5% level are reported for analyzable variables from each experiment site. Correlation coefficients were computed between all traits reported.

Protein and oil contents were determined on the dry weight basis by a near-infrared light reflectance instrument in the Department of Agronomy at the University of Illinois. The analyses were made from one sample of each cultivar composited across replications at each trial site by the cooperator who returned the sample to INTSOY for analysis.

A combined analysis was prepared for all trial locations within an environmental zone where there were five or more trials. In certain cases, a combined analysis was also prepared for an environmental zone within a restricted geographical area where there was a sufficient number of trial sites available.

## RESULTS AND DISCUSSION

Summary mean values of the parameters measured for single and multiple years are presented in Tables 5 through 52. Individual site values for the third ISVEX are reported in Tables 53 through 195. Tables with data for individual sites include agronomic, seed and other descriptive information to identify location, environment, management and the local cultivars tested. These tables are arranged by region, country, and site. Discussion of each parameter will only include those cultivars not significantly different from the leading cultivar.

### *Yield*

A summary of the yield at sites with tropical environments is presented in Table 5. The highest yields were produced at sites of less than 10° latitude and 500 m (zone I). Davis had a mean yield of 2443 kg/ha for

the 36 sites reporting, with Jupiter and Hardee close behind. At the same latitude, but a higher altitude (501 to 1000 m) in zone II, Jupiter had the highest mean yield (2394 kg/ha) followed by Improved Pelican. At latitudes from 11-20° and less than 500 m (zone IV) Davis (2065 kg/ha) was again the leading cultivar followed by Columbus, Improved Pelican, Jupiter, Williams, and Hampton 266A.

The mean rank of cultivars for high yield across sites in the tropical zones is summarized in Table 6. Davis again ranked first followed by Hardee and Jupiter for the zone I sites. Improved Pelican, Davis, Jupiter and Forrest ranked first, second, third and fourth, respectively, for the sites in zone II. Davis again had the highest mean rank followed by Columbus, Jupiter and Forrest in zone IV.

The highest yield reported from the third ISVEX was from the cultivar Hardee (6054 kg/ha), grown at Thirunelvely, Sri Lanka, a zone I site. Six other cultivars also produced yields greater than 5100 kg/ha in the same trial. Three other zone I sites reported yields greater than 4400 kg/ha for the leading cultivar. The highest yield reported from sites in zone IV was 4902 kg/ha at Papeete, Tahiti. Five other sites in the same zone also reported yields of more than 4100 kg/ha.

Table 11 shows the combined results of cultivars tested during ISVEX-2 and ISVEX-3 for zone I. The highest mean yield for the zone was 2506 kg/ha by Jupiter. Davis, Hardee, Bossier and Improved Pelican also produced mean yields of more than 2300 kg/ha.

A summary of the two year mean values for zone IV indicates Jupiter was the leading cultivar with a yield of 2158 kg/ha (Table 12). The cultivars Davis and Bossier also had mean yields over 2050 kg/ha.

The combined analyses for data from zones I - IV, VII, and X in Tables 41 through 52. Correlations between the various parameters measured are indicated below each analysis table. The combined analysis for the 10 Sri Lanka sites is presented in Table 42. The highest yielding cultivar was Hardee (2938 kg/ha) followed by Davis. Nine African sites from zone I reported data which are summarized in Table 43. Davis had the highest mean cultivar yield (2392 kg/ha) followed by Jupiter, Hardee and Forrest. The mean values for parameters from 12 Asian sites, including those from Sri Lanka, are presented in Table 44. Hardee was the highest yielding cultivar with 2595 kg/ha, followed by Davis. Fifteen South American sites were combined (Table 45) from the same zone and resulted in a higher yield of 2892 kg/ha by the cultivar Jupiter.

The 10 sites from Africa located in zone IV are combined in Table 49. Davis (1749 kg/ha) was the highest yielding cultivar, but there was no significant difference in yield among the 12 cultivars reported. Seven sites from Mesoamerica and South America are combined in Table 50 for the same zone. The highest yield was 2754 kg/ha for Jupiter. The cultivars Davis, Columbus, Forrest, Hardee, Improved Pelican, Hampton 266A and Williams produced yields which were not significantly different from Jupiter.



A summary of the yield results for environmental zones III (0-10° latitude, greater than 1000 m) and VII (21-30° latitude, 0-500 m) are found in Table 7. In zone III, Bossier had the highest mean yield (1520 kg/ha). However, the other eight cultivars reported did not differ significantly from Bossier. When individual site rank was averaged (Table 8) for the zone, Bossier was again ranked first. Zone VII had a high mean yield of 2325 kg/ha from Davis, followed by Bossier, Forrest, Hardee, Hampton 266A, Cobb, Jupiter and Williams (Table 7). The mean rank for zone VII placed Bossier ahead of Davis with the other cultivars following the same order as mean yield.

When two year means were determined for zone VII the yield results show that Bossier had the highest yield (1946 kg/ha, Table 13). Davis, Forrest, and Hardee also had mean yields above 1750 kg/ha. The yield results from environmental zone X (31-40° latitude, 0-500 m) are found in Table 9. The cultivar Williams had the highest mean yield of 2605 kg/ha, followed by Calland, Amsoy 71 and Hark. The mean rank for grain yield among the 8 sites in this environmental zone resulted in Williams again ranking first followed by Calland, Woodworth, Beeson, and Hark (Table 10). The highest individual cultivar yield at a given site within zone X was from Bet-Dagan, Israel with 4173 kg/ha.

The highest mean yield per zone reported during the third ISVEX was from zone X. Williams in zone X also had the highest mean cultivar yield. High yields of more than 2000 kg/ha were reported from zones I, II, IV, VII and X. When comparing yield results across years it would appear that cultivars Jupiter, Davis, Hardee, Bossier and Improved Pelican are the most consistent yielding varieties in environmental zone I. However, in zone IV, the cultivars Jupiter, Davis, Bossier, Forrest and Williams appear to give the most consistent yields. In zone VII, the cultivars Bossier, Davis, Forrest and Hardee appear to be the most consistent. When combined across years, it is evident that the highest yields are produced near the equator at low latitudes and low elevation. An insufficient number of sites were tested during the second ISVEX to permit combined analysis across years for zone X.

#### *Days to Flower*

The number of days from emergence to first flowering of cultivars tested in the third ISVEX are shown in Table 14. The mean number of days from emergence to flowering in zone I was 33, with a range from 29 days to 39 days. The cultivars Williams and Tracy were the first to flower and Jupiter was the latest to flower. When this characteristic was combined across two years (Table 11), the results are similar with Williams and Tracy flowering first and Jupiter the latest to flower. The two year mean number of days from emergence to flowering was only 1 day less than for the third ISVEX.

The mean number of days to flower in zone II was 39. The cultivars Columbus, Tracy, Hampton 266A, Williams and Bossier all had a mean number of days to flower of 36 being the earliest in that zone, followed by

Forrest. The latest flowering cultivars flowered on an average of 6 days later at 42 days after emergence. Those cultivars were Jupiter, Hardee, and Improved Pelican, followed by Davis.

For environmental zone IV, the mean number of days from emergence to flowering was 32, with a minimum number of days of 29 and a maximum number of days of 44 (Table 14). The cultivars Clark 63, Columbus, and Williams all flowered in 29 days after emergence, followed by Tracy, Forrest and Bossier. Jupiter required 44 days to flower in this environmental zone. When the days to flower data were combined across two years (Table 12), the results indicate that Williams, Tracy and Clark 63 flowered early and Jupiter required the greatest number of days to flower.

Table 15 summarizes the mean number of days to flower for the cultivars tested in environmental zones III and VII. In zone III Williams flowered in 39 days followed by Columbus, Tracy, Forrest, Hampton 266A and Bossier. Hardee and Improved Pelican required 64 days to flower in the same environment followed by Davis, Bossier, Hampton 266A and Forrest. The mean of all cultivars was 52 days.

From the seven sites reporting results from zone VII the mean number of days to flower was 39 days. The cultivars Williams and Clark 63 flowered in 31 days for the fewest number of days followed by Woodworth, Columbus, Tracy and Forrest. The cultivar Jupiter required the greatest number of days to flower (54) followed by Improved Pelican and Hardee. Table 13 indicates that Clark 63 and Williams were the earliest to flower when two years data were combined and that Jupiter and Improved Pelican were the latest cultivars to flower.

A summary of zone X for the number of days from emergence to first flower is presented in Table 16. Many of the cultivars tested in this environmental zone were not tested at the lower latitude environments. The cultivar Altona was the earliest cultivar to flower in 33 days followed by seven other early maturing cultivars. The latest flowering cultivar was Columbus with 50 days required. Past experience has shown that the "late maturing cultivars" such as Jupiter and Hardee do not mature before frost in the temperate zones; therefore, they were not tested during the third ISVEX in those environments.

Generally speaking, cultivars require more days to flower as the latitude of the testing site increases within the same elevation range. For example, the cultivar Williams flowered in 29 days in zone I and IV but required 31 and 44 days to flower in zones VII and X, respectively. When elevation is changed along with latitude, then the cultivar's response varies. In general, a change in elevation of 500 m has a greater effect on the number of days to flower than does a change of 10° latitude.

#### *Days to Maturity*

The mean number of days from emergence to maturity for zones I, II, and IV are presented in Table 17. The mean number of days to maturity for



zone I was 95 with a minimum of 87 for the cultivar Tracy followed by Williams, and a maximum of 107 for the cultivar Jupiter. The mean number of days to maturity for two years (Table 11) indicates similar results to those for ISVEX-3 with Tracy requiring the fewest number of days and Jupiter requiring the greatest number of days.

When the number of days to flower are subtracted from the number of days to maturity (not shown in table form) for zone I, the later maturing cultivars usually require more days from flowering to maturity than do the earlier maturing cultivars. For example, Tracy required 58 days from flowering to maturity and Jupiter required 68 days for the same development during the third ISVEX. The same trend is true when the results are combined across years.

Zone II results indicate that Tracy was again the earliest maturing cultivar followed by Williams, Hampton 266A, Bossier, Columbus and Forrest. Jupiter was the latest maturing cultivar followed by Hardee. The mean number of days for all cultivars tested was 98, which was 3 days later than for zone I.

Tracy and Williams were the earliest maturing cultivars in zone IV with 87 days required from emergence to maturity. Jupiter was again the latest maturing cultivar requiring 110 days for the same period. The cultivars Clark 63 and Columbus also were early maturing in this environment. Considering the mean number of days for all cultivars tested, the same number of days were required in zone IV as zone I. However, two of the later maturing cultivars (Jupiter and Hardee) were not included in this analysis and three earlier cultivars were included. For most cultivars, more days were required before maturity in zone IV than in zone I. When combined across two years (Table 12), cultivars Williams, Tracy, and Clark 63 all matured in the fewest number of days. Jupiter required considerably more days to mature than any of the other cultivars compared.

The results for days to harvest of zones III and VII are found in Table 18. The mean number of days for all cultivars tested in zone III was 123. Williams required only 116 days for the earliest maturing cultivar; however, several of the other cultivars were not significantly different than Williams. The latest maturing cultivars were Hardee and Improved Pelican at 133 days but Forrest, Bossier and Columbus were not significantly different.

The seven sites in zone VII had a mean number of days to maturity of 104. Woodworth required the fewest number of days to maturity, followed by Williams, Clark 63, Columbus, Tracy and Forrest. The latest maturing cultivar was Jupiter with 127 days, followed by Improved Pelican and Hardee. Table 13 indicates that when two years data were combined, Williams was the earliest maturing cultivar, followed by Clark 63. Woodworth was not tested during ISVEX-2. The latest maturing cultivar was again Jupiter when two years were combined.

The number of days from emergence to maturity for cultivars in zone X is shown in Table 19. Altona was the earliest maturing cultivar with 88 days. The latest maturing cultivar tested in this environment was Columbus with 128 days, followed by Calland with 122 days required before maturity.

The number of days from emergence to maturity normally increases as latitude and elevation increase for a given cultivar. For example, the cultivar Jupiter required 107 days to maturity in zone I, but required 110 days and 127 days in zones IV and VII, respectively. Elevation and latitude interact and increase the number of days from emergence to maturity. From zone I to zone II, which are different by 500 meters in elevation, an additional five days were required before maturity of the cultivar Jupiter when the latitude remained the same. The cooler temperatures associated with the higher elevation tend to reduce the development rate and require the plants to remain in the field for a longer period of time before they mature.

#### *Nodule Number and Dry Weight*

Nodule measurements were made to determine the effectiveness of the Rhizobium japonicum which was provided to the cooperators to be used on each test. If effective, the bacteria will cause nodules to form in association with the roots of the soybeans. Within those nodules, nitrogen will be fixed from the air and made available to the plants for utilization. Nodule numbers were counted when the first flowers appeared and a second count was made three weeks after flowering. Nodule dry weight was made by drying and weighing the nodules counted in the nodule number procedure. The values given in Table 41 and thereafter for nodule number and nodule weight are the totals for 10 plants which were sampled per plot and the weight is reported in grams.

Tables 41 through 195 include nodule number 1, nodule number 2, nodule weight 1 and nodule weight 2 data when combined and for individual sites. In Table 41 the data for zone I are presented. Nodule numbers increased from number 1 to number 2 which was expected because the time for development of nodules has been extended by 3 weeks. Nodule weight was increased accordingly. There was no significant difference among varieties for nodule number or nodule weight at the first measurement; however, there were differences in nodule number sampling 2 and nodule weight sampling 2. It is of interest to note that the lowest yielding cultivar (Tracy) also had the fewest number of nodules and the lowest nodule dry weight. Zone III (Table 47) showed a similar trend as zone I with an increase in nodule number and nodule weight at the second measurement; however, only nodule weight number 1 showed any significance among cultivars in that environment. Zone IV, presented in Table 48, followed the same trends with an increased number of nodules and dry weight 3 weeks after flowering. In this environment the date 1 sampling was significant and the date 2 sampling was not significant. Considerable variation was observed from environment to environment and site to site, concerning the number of nodules, their dry weight and their relationship to yield.

## *Plant Height*

Plant height measurements were made for each cultivar at each location during ISVEX-3. The mean plant height of all the cultivars at the 36 locations in zone I was 41 cm (Table 20). The shortest cultivar at the zone I sites was Hampton 266A followed by Tracy, Davis, and Forrest. The tallest cultivars in this environment were Jupiter (65 cm) and Improved Pelican (64 cm). The two year average for zone I was 43 cm and the cultivar Hampton 266A was the shortest cultivar, followed by Tracy (Table 11). The tallest cultivars were Jupiter and Improved Pelican at 67 cm.

In zone II the plants were shorter than in zone I, with a mean plant height of 31 cm. Table 20 shows that Hampton 266A was again the shortest cultivar, followed by Tracy, Bossier, Hardee, Davis, Forrest and Williams. The tallest cultivar in this environment was Jupiter, followed by Improved Pelican. The range in plant height was similar to zone I; however, the plants were not as tall with the shortest cultivar averaging 20 cm and the tallest cultivar averaging 57 cm.

Table 20 also shows the results in plant height for zone IV which has an average plant height of 40 cm. The shortest plants were produced by the cultivar Tracy (31 cm), followed by Bossier, Hampton 266A, and Cobb. The tallest cultivar was Jupiter at 68 cm for this environment. In Table 12, the two year average in plant height for zone IV was 42 cm and the shortest plant height reported for cultivars tested in both years was Tracy with 32 cm and the tallest cultivar was Jupiter at 69 cm.

The mean plant height for zone III (Table 21) was 41 cm with a maximum plant height of 65 cm by the cultivar Improved Pelican. The shortest cultivar was Tracy (27 cm) followed by Hampton 266A, Williams, Columbus and Davis.

Zone VII had a mean plant height of 51 cm which was taller than the previous zones mentioned (Table 21). The tallest cultivar was Improved Pelican at 88 cm followed by Jupiter. The shortest plants were produced by the cultivar Tracy followed by Forrest, Davis, Cobb, Woodworth, Hampton 266A, Bossier, Williams and Clark 63. For two years the mean plant height was 60 cm for all cultivars tested over both years (Table 13). Improved Pelican was again the tallest cultivar at 92 cm and the shortest cultivars were Tracy, Hampton 266A and Forrest.

The mean plant height for zone X was 77 cm as shown in Table 22. The tallest cultivar in this environment was Columbus at 95 cm followed by Calland. The shortest cultivar was Altona (59 cm) followed by Hodgson.

In the tropical and subtropical environments the determinate cultivars usually develop into the shortest plants with the exception of Jupiter, which is consistently a tall plant, even though it does have determinate growth habit. Improved Pelican is the only maturity group VIII cultivar tested that has the indeterminate growth habit. The early maturing cultivars are usually the shortest, and the latest maturing cultivars are usually the tallest.



### *Lodging*

Lodging is usually closely associated with plant height. Tables 23, 24, and 25 give the mean lodging scores (1 = no lodging, 5 = complete lodging) for cultivars tested in each environment. The scores are consistently low and in many environments were not significantly different. The highest lodging scores were consistently associated with those taller varieties in a given environment. Lodging during the third ISVEX did not appear to be a serious problem. However, where lodging does occur, it is expected that yield would also suffer due to a reduction in seed quality of those seeds that were already produced before lodging or a reduction in the number of seeds produced due to competition for light after plants are lodged.

### *Shattering*

Seed lost from the pod prior to harvest can result in serious yield reductions; therefore, the experiments were evaluated to score the amount of shattering which occurs, and differences among cultivars in given environments. Tables 26, 27, and 28 show the shattering scores (1 = no shattering, 5 = over 50% shattered) for cultivars tested in each of the environments. No significant difference was found among cultivars tested in any of the environmental zones, except zone X, and in that environment, there was essentially no shattering except in one cultivar. These results indicate that shattering was not a serious problem and should not have had an effect on the yield potential of any of the cultivars tested.

### *Plants Harvested*

Soybean plants have the ability to compensate for differences in plant spacing and plant population. They tend to fill in gaps in the row which are not occupied by adjacent plants. In these experiments the desired plant population was an equivalent of 333,333 plants/ha. An equal amount of seed of a given cultivar was provided to each testing site; however, there were differences in the number of seeds provided for each cultivar, depending on the germination percentage prior to packaging the seed. The prescribed amount of seed was prepackaged for individual rows and the cooperators were asked to plant the entire package of seed evenly in the given plot row. Plots were overseeded to compensate for the considerable variation in seed germination and environmental conditions which the seeds experienced prior to the time of planting. Thinning of plots was recommended. The values given in the tables beginning with Table 41 are the percentages of plants harvested, when 100% was 333,333 plants/ha. Much better stand establishment was achieved during the third ISVEX than during previous experiments of this type. Population values range from slightly below 100% stand establishment to over 200% stand establishment.

Table 41 presents zone I values for each cultivar. Davis was the highest yielding cultivar in zone I and also had the highest number of plants harvested, followed by Improved Pelican and Forrest; however, yield was not closely correlated with the number of plants harvested for each

cultivar. Overall, more plants were established in zone I than any of the other zones reported. The lowest number of plants harvested was also not associated with the lowest yielding cultivar in that environment.

Table 46 for zone II indicates that fewest plants were established with only 2% above the desired population. Again the number of plants harvested was not necessarily correlated with yield. Zones III (Table 47) and VII (Table 51) had no significant difference among cultivars for the number of plants harvested and both had stand establishments about 60% above the expected population. Zone IV is the only environment reporting a similar trend between the number of plants harvested and yield (Table 48). In zone IV Davis produced the highest yield and also had the greatest number of plants harvested. Clark 63 produced the lowest yield and had the fewest number of plants harvested.

Each year of experience by both the coordinator and the cooperators has indicated that better care and management of the seed before, during and after shipment has improved the stand establishment of the cultivars being tested. A better understanding of how the soybean seed reacts to different environments leads those involved to take better care of the seed prior to planting. A result of this improved management has been an overpopulation in most cases. Individual location studies are encouraged to determine the optimum plant population in each given environment. Such studies are extremely difficult to organize on an international scale but should be organized on an individual environment basis.

#### *Pods per Plant*

The number of pods produced per plant is a parameter usually very closely associated with yield. In Tables 41, 46, 47, 48, 51, and 52 the combined analysis of sites within an environmental zone indicates that the number of pods per plant and yield are highly correlated in each environment. The highest yielding cultivar in each environment is not necessarily the cultivar which produces the highest number of pods per plant, but the correlation is there when all the cultivars are averaged together. Tables 11, 12, and 13 give the two year combined results for the number of pods per plant for the cultivars tested in both years. In zone I (Table 11) Jupiter produced the greatest number of pods per plant and was also the highest yielding cultivar; however, the second highest yielding cultivar did not have the second greatest number of pods per plant. In zone I Tracy was the lowest yielding cultivar and also had the fewest number of pods per plant. In zone IV (Table 12) Jupiter produced the greatest number of pods per plant and the highest yield. The fewest numbers of pods per plant were produced by Williams and Tracy, although Tracy had considerably lower yield. Table 13 gives results for zone VII. In zone VII the highest yielding cultivar did not produce the most pods per plant. Those cultivars producing the average yields had the greatest number of pods. When considering the mean number of pods per plant across all cultivars tested in each environment the number of pods increased as latitude increased away from the equator. A mean of only 27 pods per plant was produced in zone I and a mean number of 42 pods per plant was produced in zone VII.

### *Seed Weight*

Seed weight is another parameter that is usually correlated with grain yield. Tables 29, 30, and 31 give the mean cultivar seed weights in grams per 100 seeds for each of the environments reported during ISVEX-3. Zone I had a mean seed weight of 18.9 g/100 seeds with the smallest seed being produced by the cultivar Improved Pelican at 15.8 g (Table 29). The largest seeds were produced by the cultivar Hampton 266A (21.2 g). In zone II, there were no significant differences among the cultivars but the overall mean for all cultivars was 21.1 g/100 seeds. In zone IV the mean seed weight was 17.4 g/100 seeds. The smallest seeds were produced by the cultivar Forrest (15.0 g) and the largest seeds were produced by the cultivar Hampton 266A (19.2 g), followed by Williams.

Zone III indicates no significant differences among cultivars tested, and had a mean seed weight of 16.5 g/100 seeds. In zone VII the seed weight was less than other zones reported with a mean of 14.1 g. The smallest seeded cultivar was Improved Pelican at 11.7 g, followed by Forrest, Bossier, Hardee and Tracy. Williams had the largest seeds for this environment but six cultivars produced seed weights not significantly less than Williams.

The mean seed weight for zone X was 16.0 g/100 seeds (Table 31). The smallest seeded cultivar was Swift at 14.4 g but five cultivars were not significantly larger than Swift. The largest seeded cultivar was Beeson at 17.6 g/100 seeds, followed by Williams, Amsoy 71, Calland, and Hark in zone X.

Tables 11, 12, and 13 show the mean of two years for seed weight. In zone I Hampton 266A had the largest seed (21.2 g) and Improved Pelican had the smallest seed (15.4 g). The mean seed weight was 18.7 g. In zone IV the mean for all cultivars was 17.5 g, slightly less than in zone I. The same variety (Hampton 266A) had the largest seed (19.2 g) and the cultivar Forrest produced the smallest seed (15.2 g). In zone VII seed size was smaller than the other two zones reported with a mean of 13.1 g/100 seeds. The smallest seeds were produced by the cultivar Improved Pelican (10.9 g) and the largest seeds were produced by the cultivar Williams (14.4 g).

In tropical and subtropical environments the mean seed weight for all cultivars in a given location tended to decrease with increased latitude from 0-30° among the sites at low elevations. Higher elevations produced inconsistent results.

### *Seed Quality*

Quality ratings of the seed were made by the cooperators after harvest to evaluate the condition of the seed before storage or use. The scoring system for seed quality was 1 for the best quality and 5 for the poorest quality.



Tables 32, 33, and 34 present the results from zones for the seed quality rating. Zones II, III, and VII showed no significant difference among the cultivars tested. The mean score for each of those environments was between fair and good quality seed by visual rating. In zone I (Table 32) the quality of the seed was better than at the other zones. The highest quality seed was from Improved Pelican which had the smallest seed. Bossier followed closely behind Improved Pelican in quality. Several cultivars ranked very close to lowest quality but none were extremely poor. The quality of seed harvested in zone IV was not as good as in zone I or II. The poorest quality seed was produced by Hampton 266A with a rating of fair. Following closely behind Hampton 266A were six other cultivars which were not significantly different in quality rating. Williams had the highest quality seed with a rating of 2.3 (good) but Davis, Columbus, and Clark 63 were not significantly different in quality. The mean seed quality for zone X (Table 34) was the lowest rating among those reported. The range in seed quality scores was from 2.5 (good) to 3.3 (fair).

#### *Protein and Oil*

To monitor the effect of environment and management on the amount of oil and protein in soybean seed, cooperators returned seed samples of each cultivar for analysis for protein and oil content. The seed samples analyzed were a composite of the replications for each cultivar.

Tables 35 - 40 present the mean protein and oil percentages for each of the cultivars tested in the representative environments. For zone I, 20 sites returned samples for protein and oil analysis which had a mean protein content of 43.3% and oil content of 23.1%. Improved Pelican had the highest protein content of 44.4% and Hampton 266A had the lowest of 41.8%. As is often true when protein content is low, the oil content tends to be high for a given cultivar. In this environment Hampton 266A had the highest oil content (24.7%); however, the lowest (21.4%) was from Tracy, even though it did not have the highest protein content. Zone II had 3 sites reporting with a mean protein content of 41.8% and oil content of 21.5%. In zone II the highest protein cultivar (Tracy) was also one of the lowest oil content cultivars at 20.7%. In zone IV, the mean protein content was 42% and oil was 23.4%. Bossier had the highest protein (44.8%) and Tracy produced the lowest oil content (21.6%).

Results from different groups of cultivars grown in zone III are presented in Tables 36 (late) and 37 (early). The earlier maturing group had protein and oil mean values of 45.0% and 16.6% respectively; the later maturing group yielded 44.0% and 17.7%. Bonus had the highest protein (48.9%) and Amsoy 71 had the highest oil (17.8%) in the early group; Columbus, the highest protein (45.6%) and Forrest the highest oil (19.0%) in the late group.

In zone VII (Table 38), the highest protein content was obtained with Williams (43.9%) and oil content with Hampton 266A (24.6%). Means for all cultivars were 41.9% and 22.6%, respectively.

At elevations less than 500 m protein content tended to decrease as latitude increased from the equator to 40°. The highest mean protein content was found in zone I. This environment also had a high mean oil content of 23.1%. Protein content was associated with elevation as the highest protein content reported was 44% from zone III. Zone III also reported the lowest oil contents. In general, soybean cultivars tended to produce a higher oil content in environments closer to the equator and at low elevations where the temperatures were more consistently warm throughout the maturation period of soybean development.

#### SUMMARY

The third ISVEX has confirmed the results of previous tests which indicate that United States soybean cultivars can be grown satisfactorily and produce adequate yields in tropical environments. This report indicates that numerous organizations throughout the world are interested in the potential of soybeans for production in their countries. The yield response does not show a consistent trend from one type of environment to another. However, the top yields were produced in the temperate environments followed closely by those at low latitude and low elevation sites in the tropics. Individual site management appears to be critical in the success of soybean production in the various areas throughout the world. The number of days from emergence to flowering and to maturity increased with an increase in latitude and elevation. Plant height increased with an increase in latitude but elevation did not have a consistent effect on plant height. Neither lodging nor shattering appears to be a serious problem in the experiments reported here. Seed weight measurements indicate that the largest seeds were produced near the equator in tropical environments, but consistent trends among other environments were not found. Seed weight was related to yield in most cases with low yielding sites producing relatively high seed weights and high yielding sites producing lower seed weights. The seed quality measurements were somewhat surprising with the indication that the best quality seed was produced in tropical environments. This was not expected because of the high temperature and humidity which are usually associated with those environments. Very little difference was found among cultivars in their seed quality rating among individual environments. Stand establishment was much better during ISVEX-3 than in previous years. The best stands were established in the tropical environments. Oil content appears to be highest in tropical environments, probably associated with the warm temperatures during maturation. Protein content was highest at low latitudes but elevation had an inconsistent effect on the protein content.

This report indicates that good soybean yields can be produced in a number of different environments throughout the world, as many locations have reported yields in excess of 4000 kg/ha. It is encouraging to note that shattering and lodging do not appear to be serious problems. However, seed quality is frequently poor under tropical conditions. Plant height at low altitudes is still a problem due to the photosensitivity of the

soybean. However, selection of cultivars which have acceptable plant height is recommended for those environments. The photosensitive character of the soybean plant also has an effect on the number of days from emergence to maturity. Under short day length the soybean tends to flower early which usually results in a shorter plant height, especially in those cultivars which have the determinate growth type. There are a few cultivars which are the exception and have acceptable height, and these cultivars are recommended for production in short day length environments.



Table 1: Soybean cultivars evaluated in the third International Soybean Variety Evaluation Experiment

Cultivar	Maturity Group	Pedigree	Kind of trial	
			Early	Late
Altona	00	Flambeau x 052-903	X	
Amsoy 71	II	Amsoy Super <sup>8</sup> x C1253 (Blackhawk x Harosoy)	X	
Beeson	II	C1253 x Kent	X	
Bonus	IV	(Harosoy x Kent) x (Blackhawk x Harosoy)	X	
Bossier	VII	Selection from Lee		X
Calland	III	(Blackhawk x Harosoy) x Kent	X	X
Clark 63	IV	(Clark [7] x CNS) x (Clark [6] x Blackhawk)	X	X
Cobb	VIII	F57-735 x D58-3358		X
Columbus	IV	(Lincoln x Ogden) x Clark	X	X
Corsoy	II	Harosoy x Capital	X	
Davis	VI	(Roanoke x [Ogden x CNS]) x (Ralsoy x Ogden)		X
Forrest	V	Dyer x Bragg	X	X
Hampton 266A	VIII	Majos x Lee		X
Hardee	VIII	(Roanoke x [Ogden x CNS]) x Imp. Pelican		X
Ilark	I	Hawkeye x Harosoy	X	
Hodgson	I	Corsoy x (M10 x PI 180501)	X	
Imp. Pelican	VIII	Tanloxi x PI 60406		X
Jupiter	IX	D49-2491 x Bilomi No. 3		X
Pickett 71	VI	Pickett x P.R. Resistant Lee	X	
Semmes	VII	(Ralsoy x Ogden) x D49-2491		X
Swift	0	(Lincoln x Richland x Korean) x (Renville x Capital)	X	
Tracy	VI	(Hill x PI 171442) x (FC 31745 x D49-2510)		X
Wells	II	(Harosoy x C1079) x (Blackhawk x Harosoy)	X	
Williams	III	Wayne x (Clark x Adams)	X	X
Woodworth	III	Wayne x (Clark x Adams)	X	X

Table 2: Description of environmental zones in the third International Soybean Variety Evaluation Experiment

Zone	Latitude	Elevation (m)	Number of sites
I	$\leq 10^{\circ}59'$ <sup>1/</sup>	$\leq 500$	38
II	$\leq 10^{\circ}59'$	501 - 1,000	5
III	$\leq 10^{\circ}59'$	$> 1,000$ <sup>2/</sup>	6
IV	$11^{\circ} - 20^{\circ}59'$	$\leq 500$	24
V	$11^{\circ} - 20^{\circ}59'$	501 - 1,000	1
VI	$11^{\circ} - 20^{\circ}59'$	$> 1,000$	3
VII	$21^{\circ} - 30^{\circ}59'$	$\leq 500$	7
VIII	$21^{\circ} - 30^{\circ}59'$	501 - 1,000	0
IX	$21^{\circ} - 30^{\circ}59'$	$> 1,000$	1
X	$31^{\circ} - 40^{\circ}59'$	$\leq 500$	10
XI	$31^{\circ} - 40^{\circ}59'$	501 - 1,000	4
XII	$31^{\circ} - 40^{\circ}59'$	$> 1,000$	2
XIII	$\geq 41^{\circ}$	$\geq 0$	2

<sup>1/</sup>  $\leq$  = less than or equal to

<sup>2/</sup>  $>$  = greater than

Table 3: Geographical description of sites where the third International Soybean Variety Evaluation Experiment was conducted and from which useful data were returned to INTSOY

Region	Country	Site	Latitude	Elevation (m)
Africa	Algeria	Khemis-Miliana	36 <sup>0</sup> 15'N	289
	Benin	Parakou	9 <sup>0</sup> 58'N	358
	Burundi	Bujumbura	3 <sup>0</sup> 20'S	780
	Cameroon	Wum	10 <sup>0</sup> N	1000
	Ethiopia	Debre Zeit	8 <sup>0</sup> 55'N	1860
		Dembere Kella	6 <sup>0</sup> 45'N	1860
	Gambia	Yundum	13 <sup>0</sup> 20'N	26
	Ghana	Ligon	5 <sup>0</sup> 39'N	60
	Ivory Coast	Badikaha	9 <sup>0</sup> 30'N	300
		Seguela	8 <sup>0</sup> N	250
		Sirasso	9 <sup>0</sup> 30'N	300
	Lesotho	Mejametalana	29 <sup>0</sup> 21'S	1550
	Mali	Koulikoro	12 <sup>0</sup> 55'N	326
		Sikasso	11 <sup>0</sup> 15'N	
	Niger	Maradi	13 <sup>0</sup> 28'N	351
		Gaya	11 <sup>0</sup> 59'N	172
	Reunion	St. Denis	20 <sup>0</sup> 53'S	800
		St. Denis	20 <sup>0</sup> 53'S	90
		St. Pierre	21 <sup>0</sup> 20'S	125
	Rhodesia	Salisbury	17 <sup>0</sup> 48'S	1506
	Rwanda	Karama	2 <sup>0</sup> 17'S	1325
	Senegal	Sefa	12 <sup>0</sup> 47'N	41
	Swaziland	Bigbend	26 <sup>0</sup> 52'S	150
	Sierra Leone	Njala	8 <sup>0</sup> N	51
	Tanzania	Ilonga	6 <sup>0</sup> 42'S	506
		Lyamungu	3 <sup>0</sup> 12'S	1020
		Mbeya	8 <sup>0</sup> 55'S	1700
	Togo	Amoutchou	7 <sup>0</sup> 21'N	160
		Davie	6 <sup>0</sup> 26'N	95
		Kitangbao	9 <sup>0</sup> 16'N	340
	Upper Volta	Bobo-Dioulasso	11 <sup>0</sup> 25'N	200
		Farako-Ba	11 <sup>0</sup> 06'N	405
		Saria	16 <sup>0</sup> 12'N	300
	Zambia	Magoye	16 <sup>0</sup> 08'S	1067
		Mufulira	12 <sup>0</sup> 37'S	1249
Asia	India	Jabalpur	23 <sup>0</sup> 10'N	393
	Indonesia	Bogor	6 <sup>0</sup> 30'S	270
	Korea	Jeju	33 <sup>0</sup> 30'N	188
		Suweon	37 <sup>0</sup> 16'N	37
	Pakistan	(3 trials)		
		Lahore	31 <sup>0</sup> 30'N	229
		Swat	34 <sup>0</sup> 46'N	895
		Tandojam	25 <sup>0</sup> 02'N	19
	Philippines	La Carlota	10 <sup>0</sup> 24'N	74
		(2 trials)		
		Los Banos	14 <sup>0</sup> 10'N	15



Table 3(cont'd): Geographical description of sites where the third International Soybean Variety Evaluation Experiment was conducted and from which useful data were returned to INTSOY

Region	Country	Site	Latitude	Elevation (m)
Asia	Sri Lanka	Alutharama (2 trials)	7° N	266
		Angunukolapalessa	6° 20'N	10
		Gannoruwa (2 trials)	9° N	457
		Kilinochchi	9° 02'N	9
		Maha Illuppallama	8° 05'N	138
		Moneragala	6° 45'N	184
		Puttalam	8° 02'N	24
		Thirunelvely (2 trials)	9° 06'N	1
	Taiwan	Shanhua	22° 30'N	9
	Thailand	Farm Suwan	15° N	300
		Khon Kaen	16° N	185
Europe	Italy	Sassari, Sardinia	40° 43'N	80
	Spain	Madrid	40° 30'N	600
	Yugoslavia	Novi Sad	45° 20'N	80
Mesoamerica	Bahamas	San Andros	24° 57'N	2
	Costa Rica	Canas	10° 24'N	9
		Guanacasta	10° 14'N	43
	Honduras	La Lima	15° 24'N	31
	Martinique	Le Lamentin	14° 37'N	10
	Nicaragua	Managua	12° 33'N	60
		Posoltega	12° 33'N	60
	Trinidad and Tobago	Port-of-Spain	11° N	6
Middle East	Iran	Karaj	35° 48'N	1300
		Rezaiyeh	37° N	1300
	Israel	Bet-Dagan	32° N	80
	Lebanon	Beqa'a	33° 55'N	995
	Saudi Arabia	Al-Hassa	25° 20'N	145
		Wadi Jizan	17° 55'N	83
North America	United States	Urbana, Illinois	40° 07'N	226
Oceania	Fiji	Legalega	17° 45'S	14
		Seaqaqa	16° 37'S	20
	Tahiti	Papeete	17° 30'S	2

*Table 3 (cont'd): Geographical description of sites where the third International Soybean Variety Evaluation Experiment was conducted and from which useful data were returned to INTSOY*

Region	Country	Site	Latitude	Elevation (m)
South America	Argentina	Parana	31° 50'S	111
		Bolivia	18° 39'S	389
	Bolivia	Palometillas	17° 20'S	260
		Santa Cruz	17° 14'S	320
		(2 trials)		
	Brazil	Manaus	3° 08'S	40
	Chile	La Platina	33° 34'S	625
	Colombia	Espinal Tolima	4° N	400
		Motilonia	10° 02'N	339
	Ecuador	Boliche	2° 21'S	17
		Pallatanga	1° 59'S	3
		Pichilingue	1° 06'S	73
		Portoviejo	1° 04'S	30
	French Guiana	Cabassou	4° 54'N	10
		Guyana	6° N	-2
	Peru	Enmore		
		(2 trials)		
		Chiclayo	5° 40'S	517
		El Porvenir	6° 31'S	232
	Venezuela	(2 trials)		
		Piura	4° 51'S	80
		Tingo Maria	9° 18'S	610
		Maracay	10° 14'N	450

Table 4: *List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
AFRICA	Algeria	Officer-in-Charge	Station Regionale I.D.C.I. Khemis-Miliana El-Asnan, ALGERIA
	Benin	Director	Institut de Recherches Agronomiques Tropicales B.P. 155 Parakou, BENIN
	Burundi	Mr. E. Bonte Mr. D. Cimpaye Mr. De Marcim	Institut des Sciences Agronomiques du Burundi B.P. 795 Bujumbura, BURUNDI
		Mr. J. De Brabandere	Mosso Station D.S. 136 Bujumbura, BURUNDI
	Cameroon	Director	Wum Area Development Authority Wum via Bamenda P.O. Box 13 CAMEROON
	Congo	Ing. Ivetic Obrad	Expert de la FAO Lekana B.P. 3 Brazzaville, CONGO
	Egypt	Dr. Ali Abdel Aziz	Head, Grain Legume Research Station Field Crops Research Institute Agricultural Research Centre Giza, EGYPT
	Ethiopia	Mr. Wondemu W. Yohannes	Agricultural Experiment Station P.O. Box 32 Debre Zeit, ETHIOPIA
		Mr. Abdurahman Ali Mr. Teklemariam Haile	Institute of Agricultural Research Bako Research Station P.O. Box 3 Bako, ETHIOPIA
		Mr. S. Eneyew BTS Mr. Demissie Mitiku Mr. Fekadu Abebe Mr. Titos Legatos	Arussie Negellie and Dembere Kella EPID-SORADEP, P.O. Box 17 Awassa, ETHIOPIA



*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
AFRICA (cont'd)	Ethiopia (cont'd)	Mr. G.M. Shekour Mr. G.E. Ande	Jimma Agricultural Institute Box 192 Jimma, ETHIOPIA
	Gambia	Mr. I.A.K. Anderson	Yundum Experimental Station Western Div. GAMBIA
	Ghana	Dr. R.B. Dadson	Legon Farm University of Ghana Legon, GHANA
	Ivory Coast	Mr. A.D. Assa Mr. R. Diallo Mr. S. Tidiane Mr. Boka	Faculte des Sciences Universite Nationale de Cote d'Ivoire B.P. 4322 Abidjan, IVORY COAST
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	Mali	Director	Institut de Recherches Agronomiques Tropicales B.P. 438 Bamako, MALI
		Mr. Roussel	Institut de Recherches Pour Les Huiles et Oleagineux B.P. 16 Koulikoro, MALI
	Mauritius	Dr. A.L. Owadally	Divisional Scientific Officer Government of Mauritius Ministry of Agriculture and Natural Resources Reduit, MAURITIUS
	Niger	Director	Institut de Recherches Agronomiques Tropicales Station de Tarna B.P. 6 Maradi, NIGER
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*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
AFRICA (cont'd)	Reunion (cont'd)	Mr. Guy Begue	Institut de Recherches Agronomiques Tropicales Ligne Paradis 97410 St. Pierre, REUNION
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	Senegal	Mr. Jean Durovray	C.N.R.A. Sefa, SENEGAL
	Sierra Leone	Mr. S.M. Funnah	Njala University College Faculty of Agriculture Private Mail Bag Freetown, SIERRA LEONE
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*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
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		Mr. B. Bernocchi Mr. I. Sikora	CERCI - Farako-Ba Bobo-Dioulasso, UPPER VOLTA
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		Mr. A.A.V. Sarmezey	Copperbelt Regional Research Station Box 668 Mulfulira, ZAMBIA
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		Mr. Mehrabuddin Naikmal Mr. Hafizullah Batash	Kundoze, AFGHANISTAN
		Mr. Mohammad Azim Bakhterwal	Mazar-I-Sharif Research Station AFGHANISTAN
	Bangladesh	Dr. Peter R. Hobbs Mr. Abdus Sobhan Mr. M.A. Hoque	Bangladesh Rice Research Institute P.O. 911 Joydevpur, BANGLADESH
	India	Dr. S.M. Sharma Mr. S.K. Mehta	Department of Plant Breeding and Genetics J.N. Krishi Vishwa Vidyalay Jabalpur - 4 (M.P.) INDIA
	Indonesia	Dr. Russell D. Freed Mr. Sumarno	Muara Experimental Farm Bogor, INDONESIA
		Mr. A. Djamhuri - M.	Experimental Farm, Kebun Jeruk Tebing Tinggi Deli North Sumatra, INDONESIA
	Nepal	Mrs. Meena Panday Mr. Jujubhai Manandhar	Khumaltar Agriculture Farm Khumaltar, Lalilpur NEPAL.



*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
ASIA (cont'd)	Pakistan	Mr. A.H. Chaudhry	Oilseeds Section Agricultural Research Institute Tandojam, PAKISTAN
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		Mr. N. Ahamed	
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		Mr. Syed Badshah	Tarnab Research Institute Peshawar, PAKISTAN
		Dr. Imtizaj Hussain	Director of Research, Crops Agricultural Research Council Islamabad, PAKISTAN
	Philippines	College of Agriculture	University of the Philippines at Los Banos La Granja La Carlota City, PHILIPPINES
		Mr. Benjamin M. Legaspi Mr. R.R. Matias	Legume Research Project Department of Agriculture & Natural Resources Bureau of Plant Industry Economic Garden Los Banos, Laguna 3732 PHILIPPINES
	South Korea	Dr. John M. Yohe	Office of Rural Development Crop Experiment Station Suweon, SOUTH KOREA
		Mr. K.Y. Park	
		Mr. S.K. Kim	
Sri Lanka		Mr. S.M. Santhirasivam	Agricultural Research Station Alutharama Mahiyangana, SRI LANKA
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		Mr. B.N. Emerson Mr. C.D. Dharmasena	Central Agriculture Research Institute, Gannoruwa Peradeniya, SRI LANKA
		Mr. N. Kanaganayagam	Agricultural Research Station Kilinochchi, SRI LANKA
		Miss P.W.S.M. Weerasinghe	Agricultural Research Station Maha Illuppallama, SRI LANKA

*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
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		Mr. S. Thirianathan Mr. K. Thurairatnam	Agricultural Research Station, Ilavankulam Puttalam, SRI LANKA
		Mr. K. Karunanayasa Mr. A. Sirinimal	Rathmalagara Estate Coconut Research Institute Lunuwila, SRI LANKA
		Mr. J.S. Selvaratnam	Agricultural Research Centre, Thirunelvely Jaffna, SRI LANKA
	Taiwan	Mr. S. Shanmugasundaram	The Asian Vegetable Research & Development Center P.O. Box 42, Shanhua Tainan 741 TAIWAN, REPUBLIC OF CHINA
	Thailand	Dr. Prasan Yingchol Mr. Apinan Kamnalrut Mr. Ed Sarobol Mr. Peerasak Srinives	Division of Agronomy Department of Plant Science College of Agriculture Kasetsart University Bangkok, THAILAND
		Dr. Terd Charoenwatana	Department of Plant Science Faculty of Agriculture Khon Kaen University Khon Kaen, THAILAND
		Dr. J. Keith Templeton Mr. W. Burantham Mr. Pattawuth Jewtrakool Mr. Prawit Wongsukon	Khun Talae Rubber Research Center Surat Thani, THAILAND
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*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
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MESO- AMERICA	Bahamas	Mr. J. Harold Stern	BARTAD Project San Andros P.O. Andros Island, BAHAMAS
	Belize	Mr. E. Garcia	Department of Agriculture Central Farm, Cayo District BELIZE
	Costa Rica	Mr. Rodrigo Alfaro Monge	Experimental Station E.J.N. Canas, COSTA RICA
	Honduras	Dr. D.L. Richardson Mr. Julio Romero	SIATSA La Lima, Cortes HONDURAS
	Jamaica	Mr. Harold R. Wilson	Caymanas Estates Ltd. Spanish Town, JAMAICA
	Martinique	Mr. Daly	Institut de Recherches Agronomiques Tropicales Le Lamentin B.P. 427 Fort de France, MARTINIQUE
	Nicaragua	Mr. Carlos J. Zarruk	Research & Development Department Banco Central de Nicaragua La Calera Managua, NICARAGUA
		Mr. Gustavo Abdalah Mr. Mauricio Ocana	Centro Experimental del Algodon Posoltega, Aptdo. 143 Leon, NICARAGUA
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	Trinidad and Tobago	Mr. R. Salandy	C.A.D.P. G.P.O. Mailbag 102 Port-of-Spain, TRINIDAD



*Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment*

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
MIDDLE EAST	Iran	Dr. M.C. Amirshahi Mr. M. Mojtahedi	College of Agriculture University of Tehran Karaj, IRAN
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	Israel	Dr. Baruch Retig Mr. W. Lehrer	Agricultural Research Organization The Volcani Center P.O. Box 6 Bet-Dagan, ISRAEL
	Jordan	Mr. N. Katkhuda Mr. N. Musa	Wadi Dulail Research Station JORDAN
	Lebanon	Dr. S. Abu-Shakra	AUB Experimental Farm Beqa'a, LEBANON
	Saudi Arabia	Director	Chinese Agricultural Technical Mission Hofuf Agricultural Research Center Al-Hassa, SAUDI ARABIA
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NORTH AMERICA	United States	Mr. R.E. Dunker	INTSOY Department of Agronomy University of Illinois Urbana, Illinois, U.S.A. 61801
OCEANIA	Fiji	Mr. Madho Prasad Mr. S.G. Vesper	Seaqqa Research Station P.A. Naduri Macuata, FIJI
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	Tahiti	Mr. Jean-Louis Reboul Mr. Robert Yau-Akui	Service de l'Economie Rurale B.P. 100 Papeete, TAHITI

Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
SOUTH AMERICA	Argentina	Ma. Margarita A. de Troncoso	INTA Estacion Experimental Regional Agropecuaria de Parana Casilla Correo 128 3100 Parana, Entre Rios, ARGENTINA
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		Mr. Vidal Velasco Rivas	Substation "Portachuelo" Palometillas, BOLIVIA
		Mr. Hebert Zurita Ovando	Estacion Experimental Agricola de Saavedra Santa Cruz, Casilla 247, BOLIVIA
	Brazil	Dr. Fazal Rahman	Research Scientist Instituto Nacional de Pesquisas da Amazonia Caixa Postal 478 - 69.000 Manaus, Amazonas, BRAZIL
	Chile	Mr. Hugo Geldres R.	Instituto de Investigaciones Agropecuarias Estacion Experimental La Platina Santa Rosa 11610 - Paradero 33 Casilla 10 La Granja Santiago, CHILE
	Colombia	Mr. O. Cardenas G.	Programa Leguminosas de Grano I.C.A. Nataimo Espinal, Tolima, COLOMBIA
		Mr. Jairo E. Cujia	"Motilonia" - Apartado Aereo 21 Codazzi, Cesar, COLOMBIA
		Mr. Miguel A. Munoz P.	Programa Leguminosas de Grano I.C.A. - Turipana, Apartado 206 Monteria, Cordoba, COLOMBIA
	Ecuador	Ing. Eduardo Calero H.	Oil Seed Program Instituto Nacional De Investigaciones Agropecuarios Estacion Experimental Boliche Apartado No. 7069 Guayaquil, ECUADOR

Table 4 (cont'd): List of cooperators participating in the third International Soybean Variety Evaluation Experiment

<u>Region</u>	<u>Country</u>	<u>Name</u>	<u>Address</u>
SOUTH AMERICA (cont'd)	French Guiana	Mr. J. Larcher	Institut de Recherches Agronomiques Tropicales Station de Cabassou B.P. 60 - 97301 Cayenne FRENCH GUIANA
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		Mr. Dwarka Persand	
		Dr. A.H. Wahab Mr. I. Hassan	Crop Development Office Project Evaluation Unit (Guysuco) GUYANA
	Peru	Ing. Cesar A. Moyano Sesquen	CRIA II - Est. Exp. de Vista Florida Sub-Est. Exp. de Huarangopampa Bagua - Apart. 116 Chiclayo, PERU
		Ing. Homer Tuesta Diaz Sr. Victor Mendoza Paredes Sr. Daniel Rodriguez	The Agricultural Experiment Station "El Porvenir" PERU
		Ing. Gonzalo A. Del Rio Escurra	Chira Exp. Station Cayetano Heredia 402 Castilla - Piura, PERU
		Sr. Mario Lopez	Tulumayo Exp. Station Apartado 78 Tingo Maria, PERU
	Venezuela	Ing. Simon Ortega Ybarra	Centro Nacional de Investigaciones Agropecuaria Maracay, VENEZUELA



Table 5: Yield of soybean grain in kilograms per hectare of cultivars observed in the third International Soybean Variety Evaluation Experiment (ISVEX) conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean grain yield (kg/ha)					
	36 sites		5 sites		21 sites	
	0-10° lat <sup>1/</sup>		0-10° lat		11-20° lat	
	0-500 m <sup>2/</sup>		501-1000 m		0-500 m	
Davis	2443	(1) <sup>3/</sup>	1839	(3)	2065	(1)
Jupiter	2412	(2)	2394	(1)	1954	(4)
Hardee	2365	(3)	1522	(5)	----	
Imp. Pelican	2191	(4)	1991	(2)	----	
Forrest	2161	(5)	1570	(4)	1956	(3)
Bossier	2026	(6)	1460	(6)	1795	(7)
Williams	2018	(7)	1348	(9)	1839	(5)
Hampton 266A	2007	(8)	1420	(7)	1821	(6)
Tracy	1758	(9) <sup>4/</sup>	1154	(10)	1624	(9)
Columbus	----		1359	(8)	1961	(2)
Cobb	----		----		1715	(8)
Clark 63	----		----		1585	(10)
Mean	2153		1606		1831	
LSD (.05)	200.2		500.3		262.0	

<sup>1/</sup> Range of latitude where trials were planted

<sup>2/</sup> Range of elevations where trials were planted

<sup>3/</sup> Numbers in parentheses indicate the ranking of mean yields

<sup>4/</sup> Cultivar omitted at some sites; therefore mean values could not be calculated

Table 6: Mean of the ranks of soybean grain yields of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean rank of grain yields		
	36 sites	5 sites	21 sites
	0-10 <sup>0</sup> lat	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	1	2	1
Jupiter	3	3	3
Hardee	2	5	-
Imp. Pelican	4	1	-
Forrest	5	4	4
Bossier	7	6	6
Williams	6	8	5
Hampton 266A	8	7	8
Tracy	9	10	10
Columbus	-	9	2
Cobb	-	-	7
Clark 63	-	-	9

Table 7: Yield of soybean grain in kilograms per hectare of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean grain yield (kg/ha)	
	5 sites	7 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	1520 (1)	2191 (2)
Davis	1509 (2)	2325 (1)
Williams	1497 (3)	1872 (8)
Forrest	1481 (4)	2189 (3)
Hardee	1375 (5)	2170 (4)
Imp. Pelican	1275 (6)	1560 (12)
Columbus	1140 (7)	1826 (9)
Tracy	1098 (8)	1742 (10)
Hampton 266A	1009 (9)	2118 (5)
Cobb	-----	1999 (6)
Jupiter	-----	1945 (7)
Clark 63	-----	1683 (11)
Woodworth	-----	1538 (13)
Mean	1323	1935
LSD (.05)	-NS-	473.3

Table 8: Mean of the ranks of soybean grain yields of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean rank of grain yields	
	5 sites	7 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	1	1
Davis	2	2
Williams	4	9
Forrest	5	3
Hardee	3	4
Imp. Pelican	7	12
Columbus	9	8
Tracy	6	11
Hampton 266A	8	5
Cobb	-	6
Jupiter	-	7
Clark 63	-	10
Woodworth	-	13

Table 9: Yield of soybean grain in kilograms per hectare of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean grain yield (kg/ha)
	8 sites
	31-40 <sup>0</sup> lat
	0-500 m
Williams	2605
Calland	2370
Amsoy 71	2287
Hark	2262
Woodworth	2224
Beeson	2211
Columbus	2158
Corsoy	2114
Wells	2103
Hodgson	2074
Swift	1818
Altona	1532
Mean	2146
LSD (.05)	374.3



Table 10: Mean of the ranks of soybean grain yields of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean rank of grain yield
	8 sites
	31-40 <sup>o</sup> lat
	0-500 m
Williams	1
Calland	2
Amsoy 71	7
Hark	5
Woodworth	3
Beeson	4
Columbus	6
Corsoy	8
Wells	9
Hodgson	10
Swift	11
Altona	12

Table 11: *Selected agronomic characteristics of soybean cultivars observed in ISVEX trials conducted during 1974 and 1975 in Zone I*

Cultivar	Mean for two years					
	Yield (kg/ha)	Days to flower	Days to harvest	Plant height (cm)	Pods per plant	Seed weight (g/100 seeds)
Jupiter	2506	38	108	67	36	19.8
Davis	2480	31	96	34	26	19.2
Hardee	2358	33	97	34	30	18.2
Bossier	2330	34	97	42	26	18.2
Imp. Pelican	2309	35	96	67	34	15.4
Forrest	2174	30	92	34	28	16.5
Williams	2122	28	88	44	22	20.3
Hampton 266A	2067	30	94	31	24	21.2
Tracy	1756	28	86	32	20	19.8
Mean	2234	32	95	43	27	18.7

Table 12: Selected agronomic characteristics of soybean cultivars observed in ISVEX trials conducted during 1974 and 1975 in zone IV

Cultivar	Mean for two years				
	Yield (kg/ha)	Days to flower	Days to harvest	Plant height (cm)	Pods per plant
Jupiter	2158	42	114	69	42
Davis	2108	34	100	36	29
Bossier	2052	36	101	42	31
Forrest	1930	32	96	36	34
Williams	1928	30	88	44	24
Hampton 266A	1840	32	99	34	26
Clark 63	1760	30	90	45	26
Tracy	1618	30	89	32	24
Mean	1924	33	97	42	30
					17.5



Table 13: Selected agronomic characteristics of soybean cultivars observed in ISVEX trials conducted during 1974 and 1975 in zone VII

Cultivar	Mean for two years					
	Yield (kg/ha)	Days to flower	Days to harvest	Plant height (cm)	Pods per plant	Seed weight (g/100 seeds)
Bossier	1946	45	113	65	46	12.6
Davis	1810	44	108	54	40	14.0
Forrest	1780	38	100	48	42	11.8
Hardee	1760	46	115	57	50	12.6
Hampton 266A	1665	43	112	48	40	13.8
Jupiter	1612	54	125	83	56	13.3
Tracy	1553	40	104	48	40	14.1
Williams	1513	30	90	50	29	14.4
Imp. Pelican	1429	54	118	92	50	10.9
Clark 63	1388	30	93	54	30	13.8
Mean	1646	42	108	60	42	13.1

Table 14: Days from emergence to first flowering of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean days to flower		
	35 sites <sup>1/</sup>	5 sites	19 sites
	0-10° lat	0-10° lat	11-20° lat
	0-500 m	501-1000 m	0-500 m
Davis	32	40	33
Jupiter	39	42	44
Hardee	34	42	--
Imp. Pelican	36	42	--
Forrest	31	39	31
Bossier	33	36	31
Williams	29	36	29
Hampton 266A	31	36	32
Tracy	29	36	30
Columbus	--	36	29
Cobb	--	--	32
Clark 63	--	--	29
Mean	33	39	32
LSD (.05)	1.3	2.8	2.4

<sup>1/</sup> Number of sites contributing to mean may vary; data for certain characteristics not recorded at some sites

Table 15: Days from emergence to first flowering of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean days to flower	
	4 sites	7 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	54	41
Davis	57	45
Williams	39	31
Forrest	51	35
Hardee	64	48
Imp. Pelican	64	49
Columbus	44	32
Tracy	46	35
Hampton 266A	51	39
Cobb	--	38
Jupiter	--	54
Clark 63	--	31
Woodworth	--	32
Mean	52	39
LSD (.05)	15.0	5.6

Table 16: Days from emergence to first flowering of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean days to flower	
	8 sites	
	31-40 <sup>0</sup> lat	
	0-500 m	
Williams	44	
Calland	40	
Amsoy 71	37	
Hark	35	
Woodworth	43	
Beeson	37	
Columbus	50	
Corsoy	37	
Wells	36	
Hodgson	35	
Swift	35	
Altona	33	
Mean	39	
LSD (.05)	3.9	



Table 17: Days from emergence to harvest of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean days to harvest		
	36 sites	5 sites	20 sites
	0-10 <sup>0</sup> lat	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	96	99	98
Jupiter	107	112	110
Hardee	97	103	--
Imp. Pelican	96	101	--
Forrest	93	98	95
Bossier	96	96	97
Williams	88	94	87
Hampton 266A	95	94	98
Tracy	87	88	87
Columbus	--	97	90
Cobb	--	--	99
Clark 63	--	--	89
Mean	95	98	95
LSD (.05)	2.5	9.8	4.2

Table 18: Days from emergence to harvest of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean days to harvest	
	4 sites	7 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	123	109
Davis	121	103
Williams	116	91
Forrest	123	99
Hardee	133	116
Imp. Pelican	133	118
Columbus	122	96
Tracy	119	96
Hampton 266A	121	109
Cobb	---	103
Jupiter	---	127
Clark 63	---	94
Woodworth	---	89
Mean	123	104
LSD (.05)	11.1	12.2

Table 19: Days from emergence to harvest of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean days to harvest	
	8 sites	
	31-40 <sup>o</sup> lat	
	0-500 m	
Williams	115	
Calland	122	
Amsoy 71	112	
Hark	108	
Woodworth	112	
Beeson	112	
Columbus	128	
Corsoy	110	
Wells	109	
Hodgson	101	
Swift	98	
Altona	88	
Mean	110	
LSD (.05)	7.2	

Table 20: Height in centimeters of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean plant height (cm)		
	36 sites	5 sites	21 sites
	0-10 <sup>o</sup> lat	0-10 <sup>o</sup> lat	11-20 <sup>o</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	33	28	36
Jupiter	65	57	68
Hardee	35	24	--
Imp. Pelican	64	45	--
Forrest	34	30	37
Bossier	35	23	32
Williams	41	31	43
Hampton 266A	30	20	33
Tracy	31	23	31
Columbus	--	33	45
Cobb	--	--	33
Clark 63	--	--	41
Mean	41	31	40
LSD (.05)	3.8	11.8	4.1

Table 21: Height in centimeters of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean plant height (cm)	
	4 sites	7 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	43	45
Davis	40	41
Williams	33	46
Forrest	46	39
Hardee	44	55
Imp. Pelican	65	88
Columbus	39	52
Tracy	27	36
Hampton 266A	30	42
Cobb	--	41
Jupiter	--	84
Clark 63	--	47
Woodworth	--	41
Mean	41	51
LSD (.05)	12.8	12.6

Table 22: Height in centimeters of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean plant height (cm)	
	8 sites	
	31-40 <sup>0</sup> lat	
	0-500 m	
Williams	86	
Calland	94	
Amsoy 71	79	
Hark	75	
Woodworth	79	
Beeson	77	
Columbus	95	
Corsoy	74	
Wells	74	
Hodgson	66	
Swift	68	
Altona	59	
Mean	77	
LSD (.05)	7.8	



Table 23: Amount of lodging of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean lodging score <sup>1/</sup>		
	33 sites	4 sites	15 sites
	0-10 <sup>0</sup> lat	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	1.1	1.0	1.1
Jupiter	1.8	1.0	1.7
Hardee	1.1	1.0	---
Imp. Pelican	1.7	1.3	---
Forrest	1.1	1.1	1.1
Bossier	1.3	1.0	1.0
Williams	1.1	1.2	1.3
Hampton 266A	1.1	1.0	1.1
Tracy	1.2	1.0	1.1
Columbus	---	1.1	1.3
Cobb	---	---	1.1
Clark 63	---	---	1.4
Mean	1.3	1.1	1.2
LSD (.05)	0.20	-NS- <sup>2/</sup>	0.25

<sup>1/</sup> Mean of lodging scores where:

1 = all plants erect

2 = all leaning slightly or few plants down

3 = all leaning moderately (45<sup>0</sup>) or 25-50% down

4 = all leaning considerably or 50-80% down

5 = all plants down

<sup>2/</sup> LSD at .05 was not significant

Table 24: Amount of lodging of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean lodging score	
	3 sites	5 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	1.0	1.2
Davis	1.0	1.4
Williams	1.0	1.0
Forrest	1.0	1.2
Hardee	1.0	1.6
Imp. Pelican	1.2	1.6
Columbus	1.2	1.1
Tracy	1.0	1.4
Hampton 266A	1.0	1.3
Cobb	---	1.2
Jupiter	---	1.9
Clark 63	---	1.1
Woodworth	---	1.4
Mean	1.0	1.3
LSD (.05)	-NS-	-NS-

Table 25: Amount of lodging of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean lodging score
	8 sites
	31-40 <sup>0</sup> lat
	0-500 m
Williams	1.7
Calland	2.0
Amsoy 71	1.9
Hark	1.8
Woodworth	1.8
Beeson	1.8
Columbus	2.4
Corsoy	1.8
Wells	1.5
Hodgson	1.7
Swift	1.9
Altona	2.0
Mean	1.9
LSD (.05)	-NS-

Table 26: Amount of shattered pods of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean shattering score <sup>1/</sup>		
	32 sites	4 sites	15 sites
	0-10 <sup>0</sup> lat	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	1.1	1.0	1.2
Jupiter	1.1	1.0	1.1
Hardee	1.1	1.0	---
Imp. Pelican	1.1	1.0	---
Forrest	1.0	1.0	1.0
Bossier	1.1	1.2	1.1
Williams	1.0	1.2	1.1
Hampton 266A	1.1	1.0	1.4
Tracy	1.1	1.6	1.2
Columbus	---	---	1.1
Cobb	---	---	1.5
Clark 63	---	---	1.2
Mean	1.1	1.1	1.2
LSD (.05)	-NS-	-NS-	-NS-

<sup>1/</sup> Mean of shattering score where:

- 1 = no shattering
- 2 = 1-10% shattered
- 3 = 10-25% shattered
- 4 = 25-50% shattered
- 5 = over 50% shattered



Table 27: Amount of shattered pods of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean shattering score	
	4 sites	6 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	1.4	1.0
Davis	1.4	1.2
Williams	1.3	1.3
Forrest	1.2	1.1
Hardee	1.2	1.3
Imp. Pelican	1.5	1.4
Columbus	1.2	1.4
Tracy	1.5	1.5
Hampton 266A	1.2	1.2
Cobb	---	1.2
Jupiter	---	1.5
Clark 63	---	1.1
Woodworth	---	1.1
Mean	1.3	1.3
LSD (.05)	-NS-	-NS-

Table 28: Amount of shattered pods of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean shattering score	
	8 sites	
	31-40 <sup>0</sup> lat	
	0-500 m	
Williams	1.0	
Calland	1.0	
Amsoy 71	1.0	
Hark	1.0	
Woodworth	1.0	
Beeson	1.0	
Columbus	1.0	
Corsoy	1.0	
Wells	1.0	
Hodgson	1.0	
Swift	1.1	
Altona	1.0	
Mean	1.0	
LSD (.05)	0.1	

Table 29: Weight of 100 seeds in grams of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean seed weight (g/100 seeds)		
	35 sites	4 sites	19 sites
	0-10 <sup>0</sup> lat	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	19.3	20.8	17.0
Jupiter	20.1	22.9	16.8
Hardee	18.5	19.5	----
Imp. Pelican	15.8	17.6	----
Forrest	16.8	19.2	15.0
Bossier	18.6	21.0	17.5
Williams	20.2	22.1	18.4
Hampton 266A	21.2	23.5	19.2
Tracy	19.7	21.5	17.9
Columbus	----	22.3	17.3
Cobb	----	----	17.6
Clark 63	----	----	16.9
Mean	18.9	21.1	17.4
LSD (.05)	0.79	-NS-	1.13

Table 30: Weight of 100 seeds in grams of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)

Cultivar	Mean seed weight (g/100 seeds)	
	5 sites	6 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	15.8	13.0
Davis	17.3	15.1
Williams	19.0	16.0
Forrest	16.4	12.7
Hardee	15.4	13.2
Imp. Pelican	14.2	11.7
Columbus	16.3	14.4
Tracy	16.5	13.7
Hampton 266A	17.6	15.4
Cobb	----	13.8
Jupiter	----	14.8
Clark 63	----	14.9
Woodworth	----	14.4
Mean	16.5	14.1
LSD (.05)	-NS-	2.05

Table 31: Weight of 100 seeds in grams of cultivars observed in the third ISVEX conducted in zone X

Cultivar	Mean seed weight (g/100 seeds)
	8 sites
	31-40 <sup>0</sup> lat
	0-500 m
Williams	17.3
Calland	17.1
Amsoy 71	17.3
Hark	16.6
Woodworth	15.2
Beeson	17.6
Columbus	15.2
Corsoy	15.2
Wells	15.2
Hodgson	15.4
Swift	14.4
Altona	15.7
Mean	16.0
LSD (.05)	1.26

Table 32: Quality of harvested seed of cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean seed quality score <sup>1/</sup>		
	28 sites	3 sites	17 sites
	0-10 <sup>0</sup> lat	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat
	0-500 m	501-1000 m	0-500 m
Davis	2.0	2.1	2.4
Jupiter	2.2	2.8	2.9
Hardee	1.9	2.3	---
Imp. Pelican	1.5	1.6	---
Forrest	1.9	2.0	2.8
Bossier	1.7	2.1	2.8
Williams	1.9	1.8	2.3
Hampton 266A	2.2	2.6	3.0
Tracy	2.1	2.8	2.8
Columbus	---	2.4	2.4
Cobb	---	---	2.8
Clark 63	---	---	2.6
Mean	1.9	2.2	2.7
LSD (.05)	0.31	-NS-	0.41

<sup>1/</sup> Mean of seed quality scores where:

- 1 = very good
- 2 = good
- 3 = fair
- 4 = poor
- 5 = very poor



Table 33: *Quality of harvested seed of cultivars observed in the third ISVEX conducted in similar environmental zones (III and VII)*

Cultivar	Mean seed quality score	
	5 sites	6 sites
	0-10 <sup>0</sup> lat	21-30 <sup>0</sup> lat
	> 1000 m	0-500 m
Bossier	2.6	1.7
Davis	2.8	1.8
Williams	1.9	1.6
Forrest	2.6	2.4
Hardee	2.7	2.0
Imp. Pelican	2.8	2.0
Columbus	3.2	1.8
Tracy	2.2	2.0
Hampton 266A	3.1	2.8
Cobb	---	2.2
Jupiter	---	3.3
Clark 63	---	2.0
Woodworth	---	2.1
Mean	2.6	2.1
LSD (.05)	-NS-	-NS-

Table 34: *Quality of harvested seed of cultivars observed in the third ISVEX conducted in zone X*

Cultivar	Mean seed quality score
	8 sites
	31-40 <sup>0</sup> lat
	0-500 m
Williams	2.5
Calland	3.1
Amsoy 71	3.0
Hark	2.6
Woodworth	2.8
Beeson	3.2
Columbus	2.5
Corsoy	2.8
Wells	3.2
Hodgson	2.6
Swift	3.3
Altona	3.2
Mean	2.9
LSD (.05)	0.54

Table 35: Percent protein and oil in cultivars observed in the third ISVEX conducted in similar environmental zones (I, II, and IV)

Cultivar	Mean protein and oil content (%)					
	20 sites		3 sites		15 sites	
	0-10° lat 0-500 m		0-10° lat 501-1000 m		11-20° lat 0-500 m	
	Protein	Oil	Protein	Oil	Protein	Oil
Imp. Pelican	44.4	22.3	--	--	43.7	22.6
Bossier	44.2	22.7	42.8	21.4	44.8	22.1
Tracy	44.0	21.4	44.4	20.7	43.5	21.6
Hardee	43.6	23.5	41.1	22.8	41.6	24.2
Jupiter	43.4	23.6	41.4	20.7	42.1	23.6
Davis	43.1	22.5	40.9	22.2	41.7	23.1
Williams	43.1	23.4	42.2	21.5	42.0	24.0
Forrest	42.1	23.1	40.7	22.2	41.2	22.9
Hampton 266A	41.8	24.7	42.6	21.6	40.6	24.8
Semmes	--	--	42.9	20.9	--	--
Calland	--	--	42.1	21.1	42.0	22.3
Columbus	--	--	41.5	21.1	42.7	23.4
Clark 63	--	--	--	--	41.1	24.3
Cobb	--	--	--	--	40.9	24.2
Woodworth	--	--	--	--	40.0	24.4
Mean	43.3	23.1	41.8	21.5	42.0	23.4

1/ Ranking of mean protein content within environmental zone

Table 36: Percent protein and oil in cultivars observed in the third ISVEX conducted in similar environmental zones (III, V, and VI)

Cultivar	Mean protein and oil content (%)					
	3 sites		1 site		2 sites	
	0-10 <sup>0</sup> lat	11-20 <sup>0</sup> lat	11-20 <sup>0</sup> lat	11-20 <sup>0</sup> lat	11-20 <sup>0</sup> lat	>1000 m
	Protein	Oil	Protein	Oil	Protein	Oil
Columbus	45.6 (1)	17.9	47.1 (2)	20.7	47.0 (3)	20.7
Tracy	45.6 (2)	14.3	46.4 (4)	17.6	47.3 (1)	18.7
Clark 63	45.3 (3)	16.8	44.9 (8)	21.1	--	--
Williams	45.2 (4)	17.2	45.9 (5)	22.7	45.4 (6)	22.5
Imp. Pelican	44.9 (5)	18.0	48.8 (1)	18.6	--	--
Bossier	44.5 (6)	18.9	46.4 (3)	20.6	47.1 (2)	20.6
Woodworth	44.1 (7)	17.6	43.3 (12)	23.7	43.9 (9)	21.0
Hardee	44.0 (8)	16.8	43.3 (11)	19.8	45.8 (4)	20.1
Davis	42.6 (9)	18.6	44.8 (9)	20.0	44.5 (8)	20.8
Hampton 266A	42.6 (10)	17.2	45.4 (6)	19.6	44.9 (7)	22.3
Forrest	41.1 (11)	19.0	43.2 (13)	20.2	43.9 (10)	20.7
Calland	--	--	45.3 (7)	20.5	45.5 (5)	20.3
Cobb	--	--	43.4 (10)	20.0	43.2 (12)	22.1
Jupiter	--	--	--	--	43.4 (11)	20.7
Mean	44.0	17.7	45.2	20.4	45.2	20.9



Table 37: Percent protein and oil in cultivars observed in the third ISVEX conducted in zone III

Cultivar	Mean protein and oil content (%)	
	3 sites	
	0-10° lat	>1000 m
	Protein	Oil
Bonus	48.9	16.5
Columbus	46.8	16.2
Altona	46.7	15.8
Hark	46.7	16.2
Clark 63	46.2	17.1
Wells	45.6	17.1
Beeson	45.5	16.6
Woodworth	45.4	17.0
Swift	44.6	16.7
Hodgson	44.4	17.6
Amsoy 71	44.1	17.8
Williams	43.9	16.1
Forrest	41.9	15.9
Mean	45.0	16.6

Table 38: Percent protein and oil in cultivars observed in the third ISVEX conducted in similar environmental zones (VII, VIII, and IX)

Cultivar	Mean protein and oil content (%)					
	6 sites 21-30° lat		1 site 21-30° lat		2 sites 21-30° lat	
	Protein	Oil	Protein	Oil	Protein	Oil
Williams	43.9	22.3	44.9	20.3	--	--
Columbus	43.7	22.1	46.4	20.3	46.5	16.7
Imp. Pelican	43.6	22.0	44.7	19.2	--	--
Tracy	42.9	21.6	44.0	18.7	43.6	16.5
Davis	42.5	21.6	41.7	21.1	--	--
Bossier	42.0	22.9	45.5	20.0	46.3	16.5
Woodworth	42.0	23.5	43.1	20.3	--	--
Hardee	41.9	22.1	43.8	20.0	46.3	15.3
Clark 63	41.9	23.1	44.7	19.8	45.3	18.4
Cobb	40.5	23.2	44.3	20.1	44.0	19.0
Forrest	40.1	22.9	42.3	21.9	43.8	17.2
Hampton 266A	39.0	24.6	43.0	20.4	44.5	16.4
Jupiter	--	--	46.5	17.4	--	--
Semmes	--	--	44.8	20.0	46.6	16.2
Davis	--	--	--	--	45.3	15.8
Mean	41.9	22.6	44.2	20.1	45.1	17.0

Table 39: Percent protein and oil in cultivars observed in the third ISVEX conducted in similar environmental zones (X, XI, and XII)

Cultivar	Mean protein and oil content (%)					
	3 sites		1 site		2 sites	
	31-40° lat		31-40° lat		31-40° lat	
	0-500 m		501-1000 m		>1000 m	
	Protein	Oil	Protein	Oil	Protein	Oil
Bonus	44.3	21.2	43.1	19.5	41.3	20.9
Columbus	42.6	20.8	--	--	40.3	19.4
Williams	41.8	22.2	39.7	19.2	39.8	20.4
Hark	41.5	22.7	40.4	19.9	39.4	21.5
Corsoy	41.1	22.2	38.8	20.0	40.7	20.3
Forrest	41.0	20.8	--	--	--	--
Wells	41.0	22.5	38.1	20.3	40.3	20.6
Altona	40.9	22.4	42.3	19.4	42.1	18.0
Beeson	40.9	22.5	41.8	19.2	40.6	20.2
Woodworth	40.8	23.0	39.3	18.9	38.4	20.8
Calland	40.7	21.5	39.9	19.8	39.0	20.7
Hodgson	40.2	23.8	37.3	22.5	40.1	21.5
Amsoy 71	39.5	23.8	37.9	20.3	38.1	20.9
Swift	39.4	23.3	35.0	22.1	37.8	22.2
Clark 63	--	--	40.8	18.5	37.9	20.9
Mean	41.2	22.3	39.4	20.0	39.7	20.7

Table 40: Percent protein and oil in cultivars observed in the third ISVEX conducted in zone XIII

Cultivar	Mean protein and oil content (%)	
	2 sites	
	> 41° lat	> 0 m
	Protein	Oil
Hark	43.7	19.7
Corsoy	43.0	19.7
Wells	42.7	19.4
Altona	42.7	19.3
Williams	42.4	19.8
Amsoy 71	41.9	19.4
Clark 63	41.5	20.5
Beeson	41.3	20.3
Woodworth	41.2	19.8
Hodgson	39.7	22.0
Swift	39.6	21.0
Mean	41.7	20.1



TABLE 41 COMBINED ANALYSIS OF SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
DAVIS	2442.93	32.34	96.06	131.97	254.48	0.94	2.56	32.78	1.13
JUPITER	2411.61	38.80	106.91	132.16	271.02	0.76	2.16	65.13	1.76
HARDEE	2364.95	33.63	97.06	139.70	288.39	0.76	2.50	34.72	1.09
IMPROVED PELICAN	2190.97	36.04	96.01	122.76	265.32	0.70	2.17	64.36	1.69
FOREST	2161.20	31.19	92.52	113.78	242.60	0.70	2.27	34.00	1.10
BOSSIER	2025.90	33.31	95.85	137.31	264.47	0.79	2.30	34.98	1.27
WILLIAMS	2018.37	28.80	88.49	132.84	243.75	0.74	2.09	40.85	1.14
HAMPTON 266A	2006.58	31.14	94.59	142.75	263.95	0.74	2.11	29.62	1.09
TRACY	1757.92	29.45	87.28	118.35	181.01	0.75	1.95	30.72	1.17
GRAND MEAN	2153.38	32.74	94.97	130.19	252.78	0.76	2.23	40.80	1.27
NUMBER EXPERIMENTS CONTRIBUTING	36	35	36	29	30	23	23	36	33
STANDARD ERROR OF VARIETY MEAN	71.92	0.47	0.89	7.09	13.95	0.06	0.13	1.37	0.07
COEFFICIENT OF VARIATION	40.08%	16.84%	11.18%	58.65%	60.45%	70.01%	53.94%	40.23%	64.12%
5% LSD VARIETY MEANS (*****=NS)	200.22	1.30	2.46	*****	38.87	*****	0.35	3.81	0.20

CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)									
YIELD	1.00	0.00	0.37++	-0.01	0.09++	-0.00	0.01	0.33++	0.13++
DAYS TO FLOWER	1.296	1.260	1.296	1.044	1.080	828	828	1.296	1.188
DAYS TO MATURITY	1.260	1.00	0.44++	-0.01	-0.03	0.14++	0.20++	0.28++	0.23++
NODULE NUMBER 1	0.37++	0.44++	1.00	0.03	0.13++	0.11++	0.07+	0.35++	0.26++
NODULE NUMBER 2	1.296	1.260	1.296	1.044	1.080	828	828	1.296	1.188
NODULE WEIGHT 1	-0.01	-0.01	0.03	1.00	0.66++	0.67++	0.58++	-0.05	-0.07+
NODULE WEIGHT 2	1.044	1.044	1.044	1.044	1.00	0.33++	0.65++	0.03	-0.07+
PLANT HEIGHT	1.080	1.080	1.080	1.044	1.080	828	828	1.080	0.972
LODGING	-0.00	0.14++	0.11++	0.67++	0.33++	1.00	0.70++	0.00	-0.02
SHATTER	828	828	828	828	828	828	792	828	756
PLANTS	0.01	0.20++	0.07+	0.58++	0.65++	0.70++	1.00	-0.02	-0.14++
PODS PER PLANT	828	828	828	792	828	792	828	828	756
100 SEED WEIGHT	0.33++	0.28++	0.35++	-0.05	0.03	0.00	-0.02	1.00	0.43++
QUALITY OF SEED	1.296	1.260	1.296	1.044	1.080	828	828	1.296	1.188
	0.13++	0.23++	0.26++	-0.07+	-0.07+	-0.02	-0.14++	0.43++	1.00
	1.188	1.152	1.188	936	972	756	756	1.188	1.188
	-0.10++	0.38++	0.20++	0.09++	-0.00	0.06	-0.01	-0.08+	0.08++
	1.152	1.116	1.152	900	936	720	720	1.152	1.116
	0.06+	-0.16++	-0.08++	0.03	-0.04	-0.10++	-0.12++	-0.05	-0.07+
	1.260	1.224	1.260	1.044	1.044	828	792	1.260	1.152
	0.47++	0.28++	0.38++	0.07+	0.10++	0.12++	0.07+	0.50++	0.25++
	1.260	1.260	1.260	1.044	1.080	828	828	1.260	1.152
	0.46++	-0.14++	0.29++	-0.05	0.05	0.06	0.02	0.03	0.17++
	1.260	1.260	1.260	1.044	1.080	828	828	1.260	1.152
	-0.16++	-0.04	-0.04	-0.15++	-0.16++	0.06	-0.06	-0.09++	-0.04
	1.008	972	1.008	828	864	612	612	1.008	936

TABLE 41 COMBINED ANALYSIS OF SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
DAVIS	1.09	210.02	22.86	19.28	1.95
JUPITER	1.10	188.17	33.11	20.13	2.21
HARDEE	1.07	184.21	28.41	18.49	1.88
IMPROVED PELICAN	1.13	205.73	30.04	15.81	1.47
FORREST	1.05	201.87	24.58	16.81	1.92
BOSSIER	1.12	188.34	23.47	18.55	1.74
WILLIAMS	1.04	190.69	20.63	20.18	1.86
HAMPTON 266A	1.08	188.19	23.56	21.25	2.21
TRACY	1.14	196.66	18.59	19.69	2.09
GRAND MEAN	1.09	194.88	25.03	18.91	1.92
NUMBER EXPERIMENTS CONTRIBUTING	32	35	35	35	28
STANDARD ERROR OF VARIETY MEAN	0.03	3.93	0.94	0.29	0.11
COEFFICIENT OF VARIATION	34.09%	23.88%	44.21%	17.84%	62.02%
5% LSD VARIETY MEANS (*****=NS)	*****	10.95	2.60	0.79	0.31
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.10++	0.06+	0.47++	0.46++	-0.16++
DAYS TO FLOWER	1152	1260	1260	1260	1008
DAYS TO MATURITY	0.38++	-0.16++	0.28++	-0.14++	-0.04
NODULE NUMBER 1	1116	1224	1260	1260	972
NODULE NUMBER 2	0.20++	-0.08++	0.38++	0.29++	-0.04
NODULE WEIGHT 1	1152	1260	1260	1260	1008
NODULE WEIGHT 2	0.09++	0.03	0.07+	-0.05	-0.15++
PLANT HEIGHT	900	1044	1044	1044	828
LODGING	-0.00	-0.04	0.10++	0.05	-0.16++
SHATTER	936	1044	1080	1080	864
PLANTS HARVEST	720	-0.10++	0.12++	0.06	0.06
PODS PER PLANT	-0.01	-0.12++	0.07+	0.02	-0.06
100 SEED WEIGHT	792	828	828	828	612
QUALITY OF SEED	-0.08+	-0.05	0.50++	0.03	-0.09++
	1152	1260	1260	1260	1008
	0.08++	-0.07+	0.25++	0.17++	-0.04
	1116	1152	1152	1152	936
	1.00	-0.04	0.01	-0.03	-0.01
	1152	1116	1116	1116	900
	-0.04	1.00	-0.39++	-0.12++	-0.15++
	1116	1260	1224	1224	972
	0.01	-0.39++	1.00	0.13++	0.02
	1116	1224	1260	1260	972
	-0.03	-0.12++	0.13++	1.00	0.18++
	1116	1224	1260	1260	972
	-0.01	-0.15++	0.02	0.18++	1.00
	900	972	972	972	1008

TABLE 42 COMBINED ANALYSIS OF SRI LANKA SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
HARDEE	2938.31	33.13	97.55	141.15	282.50	0.55	1.34	37.65	1.00
DAVIS	2750.37	30.75	96.10	123.10	253.15	0.56	1.84	33.83	1.00
BOSSIER	2578.38	34.93	95.65	148.93	282.13	0.52	1.85	43.35	1.14
BRAGG	2492.93	31.03	93.38	108.58	282.75	0.38	1.75	36.14	1.06
FORREST	2447.65	30.25	90.90	110.60	225.65	0.36	1.54	34.59	1.06
WILLIAMS	2441.10	27.60	87.33	132.40	197.75	0.36	1.58	41.16	1.06
IMPROVED PELICAN	2403.90	36.30	96.28	105.10	209.35	0.38	1.41	67.37	1.53
PB-1	2369.60	33.23	88.10	179.63	297.23	0.59	2.12	45.73	1.36
S.J.2	2355.42	35.55	96.88	106.68	207.20	0.42	1.49	60.57	1.64
HAMPTON 266A	2274.52	30.30	93.00	123.73	225.38	0.39	1.45	29.96	1.00
TRACY	2224.10	27.73	85.85	122.45	195.18	0.39	1.51	30.02	1.06
CLARK 63	2193.68	30.08	85.80	119.50	184.13	0.55	1.68	47.72	1.39
JUPITER	2187.04	41.25	108.50	114.35	228.93	0.45	1.43	65.41	1.67
BONUS	2032.83	27.73	88.60	106.45	196.65	0.31	1.55	37.39	1.00
HILL	1968.75	31.23	87.65	115.13	211.63	0.37	1.51	35.48	1.19
GRAND MEAN	2377.24	32.67	92.77	123.98	231.97	0.44	1.64	43.09	1.21
NUMBER EXPERIMENTS CONTRIBUTING	10	10	10	10	10	10	9	10	9
STANDARD ERROR OF VARIETY MEAN	122.17	0.86	1.17	11.70	17.58	0.05	0.16	2.31	0.14
COEFFICIENT OF VARIATION	32.50%	17.05%	7.96%	59.71%	47.94%	73.26%	59.69%	33.90%	68.50%
5% LSD VARIETY MEANS (*****=NS)	341.92	2.42	3.27	32.76	49.21	0.14	*****	6.46	0.39
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ** - PROB=.01)									
YIELD KG/HA	1.00	0.16++	0.53++	-0.17++	-0.03	0.12++	0.11+	0.41++	-0.01
DAYS TO FLOWER	0.16++	1.00	0.49++	-0.09+	-0.02	0.07	0.06	0.55++	0.21++
DAYS TO MATURITY	0.58++	0.49++	1.00	0.02	0.14++	0.15++	0.08	0.50++	0.13++
NODULE NUMBER 1	-0.17++	-0.09+	0.02	1.00	0.57++	0.39++	0.23++	-0.02	-0.01
NODULE NUMBER 2	-0.03	-0.02	0.14++	0.57++	1.00	0.19++	0.52++	0.06	-0.11++
NODULE WEIGHT 1	0.12++	0.07	0.15++	0.39++	0.19++	1.00	0.60++	0.14++	0.26++
NODULE WEIGHT 2	0.11+	0.06	0.08	0.23++	0.52++	0.60++	1.00	0.15++	0.03
PLANT HEIGHT	0.41++	0.55++	0.50++	-0.02	0.06	0.14++	0.15++	1.00	0.41++
LODGING	-0.01	0.21++	0.13++	-0.01	-0.11++	0.26++	0.03	0.41++	1.00
SHATTER	-0.18++	0.05	0.00	0.04	-0.11++	-0.05	-0.08	-0.02	-0.10+
PLANTS HARVEST	-0.00	-0.10+	0.01	0.19++	0.22++	0.41++	0.25++	-0.07	0.09+
PODS PER PLANT	0.59++	0.44++	0.50++	-0.13++	-0.10+	-0.02	-0.00	0.56++	0.15++
100 SEED WEIGHT	0.43++	-0.16++	0.41++	-0.06	0.01	0.24++	0.19++	0.00	-0.07
QUALITY OF SEED	-0.05	0.03	0.17++	-0.16++	-0.28++	0.13++	-0.12	-0.19++	0.04
	540	540	540	540	540	540	480	540	480

TABLE 42 COMBINED ANALYSIS OF SRI LANKA SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
HARDEE	1.10	243.95	26.01	17.82	1.42
DAVIS	1.08	248.85	21.35	18.90	1.72
BOSSIER	1.20	233.45	22.90	17.42	1.39
BRAGG	1.08	250.38	18.48	19.02	1.39
FORREST	1.03	242.58	23.20	15.95	1.47
WILLIAMS	1.00	239.20	19.17	20.16	1.39
IMPROVED PELICAN	1.25	239.45	27.43	14.72	1.25
PS-1	1.18	251.45	31.61	13.02	1.11
S.J.2	1.15	245.98	28.77	14.55	1.19
HAMPTON 266A	1.05	207.03	24.18	20.40	1.42
TRACY	1.13	246.35	18.26	19.29	1.64
CLARK 63	1.85	246.75	21.67	18.07	1.47
JUPITER	1.20	213.55	31.62	19.18	1.69
BONUS	1.20	207.65	20.82	19.56	1.89
HILL	1.13	232.15	21.15	16.28	1.56
GRAND MEAN	1.17	236.58	23.77	17.62	1.47
NUMBER EXPERIMENTS CONTRIBUTING	10	10	10	10	9
STANDARD ERROR OF VARIETY MEAN	0.12	9.18	1.62	0.43	0.13
COEFFICIENT OF VARIATION	63.18%	24.54%	43.22%	15.45%	53.88%
5% LSD VARIETY MEANS (****=NS)	0.33	25.69	4.55	1.20	0.37
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.18++	-0.00	0.59++	0.43++	-0.05
DAYS TO FLOWER	0.05	-0.10+	0.44++	-0.16++	0.03
DAYS TO MATURITY	0.00	0.01	0.50++	0.41++	0.17++
NODULE NUMBER 1	0.04	0.19++	-0.13++	-0.06	-0.16++
NODULE NUMBER 2	-0.11++	0.22++	-0.10+	0.01	-0.28++
NODULE WEIGHT 1	-0.05	0.41++	-0.02	0.24++	0.13++
NODULE WEIGHT 2	-0.08	0.25++	-0.00	0.19++	-0.12+
PLANT HEIGHT	-0.02	-0.07	0.56++	0.00	-0.19++
LODGING	-0.10+	0.09+	0.15++	-0.07	0.04
SHATTER	1.00	0.07	-0.11++	-0.14++	0.12++
PLANTS HARVEST	0.07	1.00	-0.45++	0.04	0.09+
PODS PER PLANT	-0.11++	-0.45++	1.00	0.09+	-0.08
100 SEED WEIGHT	-0.14++	0.04	0.09+	1.00	0.26++
QUALITY OF SEED	0.12++	0.09+	-0.08	0.26++	1.00
	540	540	540	540	540



TABLE 43 COMBINED ANALYSIS OF AFRICAN SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
DAVIS	2392.09	32.31	90.72	146.25	248.57	0.76	2.90	28.20	1.08
JUPITER	2293.94	37.75	101.56	132.92	263.61	0.61	2.23	56.22	1.69
HARDEE	2194.49	31.67	91.06	165.92	307.54	0.95	3.41	29.13	1.03
FORREST	2068.40	31.47	88.61	109.58	254.21	0.83	3.04	30.31	1.11
COBB	1838.55	30.00	91.58	111.54	233.18	1.06	2.92	28.15	1.06
BOSSIER	1836.63	31.08	90.53	142.96	255.29	0.91	2.65	28.09	1.25
IMPROVED PELICAN	1770.42	36.36	90.94	125.71	254.93	0.64	2.32	57.38	1.47
HAMPTON 266A	1747.57	30.33	88.17	166.46	315.54	0.92	2.68	24.92	1.14
COLUMBUS	1729.41	27.53	85.14	143.67	274.68	0.70	2.94	39.57	1.17
SEMMES	1700.40	30.64	89.67	138.21	268.14	0.82	2.47	23.08	1.03
WILLIAMS	1663.85	27.28	83.22	148.50	254.50	0.73	2.56	35.64	1.19
TRACY	1428.92	28.61	82.86	133.79	172.14	1.10	2.66	25.13	1.22
CLARK 63	1418.29	27.42	83.86	111.58	222.89	0.63	2.54	33.79	1.31
WOODWORTH	1304.97	26.56	80.22	111.04	159.89	0.49	2.26	33.47	1.42
GRAND MEAN	1813.42	30.64	88.44	134.87	248.94	0.80	2.68	33.79	1.23
NUMBER EXPERIMENTS CONTRIBUTING	9	9	9	6	7	3	4	9	9
STANDARD ERROR OF VARIETY MEAN	117.06	0.73	1.43	14.24	25.82	0.13	0.33	2.16	0.14
COEFFICIENT OF VARIATION	38.73%	14.22%	9.72%	51.74%	54.88%	57.96%	49.26%	38.41%	66.51%
5% LSD VARIETY MEANS (*****=NS)	328.31	2.04	4.02	*****	72.70	*****	*****	6.07	0.38

CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)									
YIELD	1.00								
KG/HA	504	-0.08							
DAYS TO FLOWER	-0.08	504	0.46++	0.11+	0.41++	0.30++	0.09	0.41++	0.28++
DAYS TO MATURITY	504	1.00	0.47++	0.14+	-0.10	0.53++	0.21++	0.23++	-0.13++
NODULE NUMBER 1	504	0.46++	504	336	392	168	224	504	504
NODULE NUMBER 2	504	0.47++	1.00	0.09	0.28++	0.38++	0.04	0.37++	0.18++
NODULE WEIGHT 1	336	0.11+	0.09	1.00	0.56++	0.78++	0.68++	0.01	0.06
NODULE WEIGHT 2	392	-0.10	0.28++	0.56++	1.00	0.62++	0.63++	0.15++	0.24++
PLANT HEIGHT	168	0.53++	392	336	392	168	224	392	392
LODGING	504	0.21++	0.38++	0.68++	0.63++	1.00	0.63++	-0.14	-0.21++
SHATTER	504	0.23++	0.37++	0.01	0.15++	-0.04	-0.11	1.00	0.38++
PLANTS HARVEST	448	0.28++	0.18++	0.06	0.24++	-0.14	-0.21++	0.38++	1.00
PODS PER PLANT	504	-0.09	0.04	0.07	0.04	0.00	0.00	0.13++	0.08
100 SEED WEIGHT	504	-0.28++	0.17++	-0.05	0.09	-0.30++	-0.14	-0.12++	0.10+
QUALITY OF SEED	448	0.38++	0.50++	-0.07	0.06	0.13	-0.03	0.58++	0.12++
	448	0.41++	0.54	0.36	0.392	168	224	504	504
	448	-0.41++	0.21++	0.27++	0.38++	0.47++	0.02	0.14++	0.31++
	448	-0.09	0.04	0.36	0.392	168	224	504	504
	448	0.15++	-0.09	-0.10	-0.22++	-0.01	-0.12	0.03	-0.04
	448	448	448	280	336	112	168	448	448

TABLE 43 COMBINED ANALYSIS OF AFRICAN SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
DAVIS	1.00	196.09	21.26	19.63	2.03
JUPITER	1.00	172.84	30.61	19.98	2.59
HARDEE	1.00	163.56	26.46	18.52	1.94
FORREST	1.00	189.25	22.64	16.78	2.25
COBB	1.00	174.00	23.15	19.00	1.94
BOSSIER	1.00	171.50	21.79	18.85	1.66
IMPROVED PELICAN	1.00	189.19	29.58	14.66	1.44
HAMPTON 266A	1.00	177.50	20.33	20.47	2.41
COLUMBUS	1.03	174.69	19.52	19.30	2.13
SEMME	1.00	187.94	19.42	19.17	2.22
WILLIAMS	1.00	167.88	18.02	20.97	2.41
TRACY	1.00	179.31	15.74	20.13	2.47
CLARK 63	1.00	153.00	18.48	18.82	2.63
WOODWORTH	1.03	161.72	15.85	18.88	3.09
GRAND MEAN	1.00	175.60	21.63	18.94	2.23
NUMBER EXPERIMENTS CONTRIBUTING	8	8	9	9	8
STANDARD ERROR OF VARIETY MEAN	0.01	5.46	1.35	0.41	0.25
COEFFICIENT OF VARIATION	6.66%	17.60%	37.54%	12.86%	63.39%
5% LSD VARIETY MEANS (*****NS)	*****	15.34	3.80	1.14	0.70
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.01	0.03	0.56++	0.56++	-0.15++
DAYS TO FLOWER	448	448	504	504	448
	-0.09	-0.28++	0.38++	-0.41++	-0.09
DAYS TO MATURITY	448	448	504	504	448
	0.04	-0.17++	0.50++	0.21++	-0.09
NODULE NUMBER 1	448	448	504	504	448
	0.07	-0.05	-0.07	0.27++	-0.10
NODULE NUMBER 2	280	336	336	336	280
	0.04	0.09	0.06	0.38++	-0.22++
NODULE WEIGHT 1	336	336	392	392	336
	0.00	-0.30++	0.13	0.47++	-0.01
NODULE WEIGHT 2	112	168	168	168	112
	0.00	-0.14	-0.03	0.02	-0.12
PLANT HEIGHT	168	168	224	224	168
	0.13++	-0.12++	0.58++	0.14++	0.03
LOGGING	448	448	504	504	448
	0.08	0.10+	0.12++	0.31++	-0.04
SHATTER	448	448	504	504	448
	1.00	-0.02	-0.07	0.06	0.06
PLANTS HARVEST	448	392	448	448	392
	-0.02	1.00	-0.31++	0.02	-0.17++
PODS PER PLANT	392	448	448	448	392
	-0.07	-0.31++	1.00	0.09+	-0.04
100 SEED WEIGHT	448	448	504	504	448
	0.06	0.02	0.09+	1.00	0.14++
QUALITY OF SEED	448	448	504	504	448
	0.06	-0.17++	-0.04	0.14++	1.00
	392	392	448	448	448

TABLE 44 COMBINED ANALYSIS OF ASIAN SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
HARDEE	2595.05	33.48	96.54	129.41	260.41	0.55	1.84	37.10	1.02
DAVIS	2432.28	30.68	94.00	112.32	231.68	0.56	1.84	33.81	1.00
BOSSIER	2275.90	34.48	93.63	136.39	260.84	0.52	1.85	41.00	1.11
WILLIAMS	2197.82	27.82	87.56	121.09	182.57	0.36	1.58	42.26	1.07
FORREST	2160.54	30.23	89.67	101.64	207.09	0.36	1.54	34.62	1.07
IMPROVED PELICAN	2137.75	36.36	95.56	95.91	192.68	0.38	1.41	68.74	1.61
HAYPTON 266A	1997.85	30.27	91.42	113.52	208.57	0.39	1.45	30.01	1.00
TRACY	1994.17	27.93	85.83	112.59	179.52	0.39	1.51	31.19	1.05
CLARK 63	1972.58	30.07	85.83	109.39	169.55	0.55	1.68	46.70	1.32
JUPITER	1899.81	41.59	106.46	104.32	210.00	0.45	1.43	66.30	1.61
GRAND MEAN	2166.37	32.29	92.05	113.66	210.29	0.45	1.61	43.17	1.19
NUMBER EXPERIMENTS CONTRIBUTING	12	11	12	11	11	10	9	12	11
STANDARD ERROR OF VARIETY MEAN	99.48	0.73	1.19	10.46	14.02	0.05	0.14	2.21	0.10
COEFFICIENT OF VARIATION	31.82%	15.98%	0.88%	61.07%	44.21%	75.54%	51.84%	35.49%	58.20%
5% LSD VARIETY MEANS (*****=NS)	279.17	2.19	3.33	*****	39.38	0.15	*****	6.21	0.29

CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, +- - PROB=.01)									
YIELD	KG/HA	1.00							
DAYS TO FLOWER		0.01	0.53++	-0.00	0.10+	0.11+	0.10	0.27++	-0.01
DAYS TO MATURITY		0.01	0.53++	-0.10+	-0.00	0.06	0.08	0.55++	0.25++
NODULE NUMBER 1		0.53++	1.00	0.05	0.17++	0.15++	0.07	0.48++	0.19++
NODULE NUMBER 2		0.10+	0.05	1.00	0.68++	0.37++	0.24++	-0.07	-0.01
NODULE WEIGHT 1		0.11+	0.17++	0.68++	1.00	0.21++	0.53++	0.02	-0.07
NODULE WEIGHT 2		0.06	0.15++	0.37++	0.21+	1.00	0.58++	0.14++	0.27++
PLANT HEIGHT		0.10	0.08	0.24++	0.53++	0.58++	1.00	0.16++	0.08
LODGING		0.27++	0.55++	0.48++	0.02	0.36	0.36	1.00	0.47++
SHATTER		-0.01	0.19++	-0.01	-0.07	0.27++	0.08	0.47++	1.00
PLANTS HARVEST		0.14++	0.04	0.29++	0.02	0.36	0.36	0.40	0.40
PODS PER PLANT		0.50++	0.55++	-0.18++	-0.08	-0.02	0.04	0.52++	0.23++
100 SEED WEIGHT		0.53++	0.37++	0.13++	0.16++	0.29++	0.25++	-0.01	-0.04
QUALITY OF SEED		-0.35++	0.16++	-0.35++	-0.40++	0.15++	-0.17++	-0.05	0.02
		440	440	440	400	360	320	440	400

TABLE 44 COMBINED ANALYSIS OF ASIAN SITES IN ZONE I FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
HARDEE	1.08	232.23	26.19	17.61	1.57
DAVIS	1.06	245.23	21.27	18.40	1.91
BOSSIER	1.17	228.40	22.43	17.22	1.66
WILLIAMS	1.00	231.27	18.85	19.90	1.41
FORREST	1.04	236.88	22.82	15.64	1.75
IMPROVED PELICAN	1.21	232.73	27.32	14.40	1.48
HAMPTON 266A	1.04	208.40	23.50	20.02	1.82
TRACY	1.10	237.40	17.75	19.08	1.86
CLARK 63	1.71	231.96	21.54	18.02	1.68
JUPIER	1.17	210.71	30.86	18.44	2.20
GRAND MEAN	1.16	229.52	23.25	17.87	1.73
NUMBER EXPERIMENTS CONTRIBUTING	12	12	11	11	11
STANDARD ERROR OF VARIETY MEAN	0.11	8.41	1.46	0.43	0.16
COEFFICIENT OF VARIATION	68.07%	25.40%	41.79%	16.01%	62.83%
5% LSD VARIETY MEANS (****=NS)	0.32	*****	4.12	1.21	0.46
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.13++	0.14++	0.56++	0.53++	-0.35++
DAYS TO FLOWER	0.09	-0.10+	0.39++	-0.16++	0.16++
DAYS TO MATURITY	0.01	0.04	0.55++	0.37++	0.01
NODULE NUMBER 1	0.05	0.29++	-0.18++	0.13++	-0.35++
NODULE NUMBER 2	-0.07	0.29++	-0.08	0.16++	-0.40++
NODULE WEIGHT 1	-0.08	0.40++	-0.02	0.29++	0.15++
NODULE WEIGHT 2	-0.13+	0.24++	0.04	0.25++	-0.17++
PLANT HEIGHT	-0.00	-0.08	0.52++	-0.01	-0.05
LODGING	-0.08	0.02	0.23++	-0.04	0.02
SHATTER	1.00	0.08	-0.08	-0.14++	0.01
PLANTS HARVEST	0.08	1.00	-0.42++	0.11+	-0.07
PODS PER PLANT	-0.08	-0.42++	1.00	0.23++	-0.04
100 SEED WEIGHT	-0.14++	0.11+	0.23++	1.00	0.01
QUALITY OF SEED	0.01	-0.07	-0.04	0.01	1.00
	440	440	440	440	440



Table 45 COMBINED ANALYSIS OF CENT. & SO. AMERICAN SILES IN 1953 I FOR ISEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	SEED WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
JUPITER	2091.65	37.38	110.43	157.29	331.27	1.12	2.30	69.54	1.92
IMPROVED PELICAN	2485.67	35.69	99.42	145.30	337.96	1.03	2.30	65.03	1.90
DAVIS	2481.96	33.57	160.90	142.85	278.81	1.36	3.08	34.70	1.27
COLUMBUS	2366.34	30.86	94.95	131.92	307.02	1.05	3.08	47.20	1.29
HARDEE	2263.15	34.92	161.08	136.17	302.88	0.91	2.73	36.13	1.19
ZODIAC	2217.41	31.72	97.15	127.00	268.33	1.01	2.61	35.71	1.12
HAMPTON 266A	2168.23	32.25	100.94	157.69	264.63	1.03	2.47	32.14	1.13
WILLIAMS	2087.52	30.43	92.34	135.77	293.56	1.12	2.36	42.45	1.15
BOSSIER	1939.46	33.76	100.83	135.33	273.15	1.03	2.56	34.24	1.42
TRACY	1766.33	31.07	91.06	115.92	167.54	1.00	2.06	33.71	1.23
CORB	1548.42	32.65	96.73	116.67	225.25	1.00	2.38	31.63	1.19
WORTH	1535.52	31.15	91.73	103.27	186.38	0.94	1.74	39.12	1.23
GRAND MEAN	2147.73	32.97	98.29	133.81	273.07	1.05	2.55	41.67	1.34
NUMBER EXPERIMENTS CONTRIBUTING	15	15	15	12	12	10	10	15	13
STANDARD ERROR OF VARIETY MEAN	120.31	0.66	1.63	12.55	31.71	0.10	0.26	2.36	0.11
COEFFICIENT OF VARIATION	45.73%	15.40%	12.82%	64.38%	80.44%	53.06%	64.34%	43.74%	59.90%
5% LSD VARIETY MEANS (*****NS)	354.28	1.63	4.54	*****	88.77	*****	0.73	6.61	0.31

CORRELATIONS AND NUMBER OF OBSERVATIONS									
	YIELD	KG/HA							
YIELD	1.00	0.07	0.08+	-0.06	0.00	-0.04	0.04	0.42++	0.19++
DAYS TO FLOWER	0.07	1.00	0.35++	0.12++	0.10+	0.25++	0.30	0.05	0.39++
DAYS TO MATURITY	0.08+	0.35++	1.00	0.01	0.09+	-0.07	0.06	0.10++	0.27++
NODULE NUMBER 1	-0.06	0.12++	0.01	1.00	0.65++	0.78++	0.30	-0.02	-0.18++
NODULE NUMBER 2	0.01	0.10+	0.09+	0.65++	1.00	0.30++	0.77++	0.02	-0.23++
NODULE WEIGHT 1	-0.04	0.25++	-0.07	0.78++	0.30++	1.00	0.66++	-0.00	-0.12+
NODULE WEIGHT 2	0.04	0.19++	0.06	0.69++	0.77++	0.66++	1.00	-0.02	-0.21++
PLANT HEIGHT	0.42++	0.05	0.10++	-0.02	0.02	-0.00	-0.02	1.00	0.44++
LODGING	0.19++	0.39++	0.27++	-0.18++	-0.23++	-0.12+	-0.21++	0.44++	1.00
SHATTER	-0.14++	0.57++	0.19++	0.23++	0.09	0.34++	0.28++	-0.21++	0.15++
PLANTS HARVEST	0.20++	-0.11++	-0.00	0.01	-0.11++	-0.04	-0.07	0.00	-0.01
PODS PER PLANT	0.31++	0.07+	0.12++	0.17++	0.14++	0.17++	0.09	0.41++	0.23++
100 SEED WEIGHT	0.32++	0.02	0.25++	0.76	0.56	-0.19++	-0.11+	0.05	0.14++
QUALITY OF SEED	0.03	-0.23++	-0.12+	0.13+	0.07	-0.12+	-0.22++	-0.10+	-0.12+
	432	432	432	384	384	288	288	432	384

TABLE 45 COMBINED ANALYSIS OF CENT. &amp; SO. AMERICAN STEPS IN ZONE I FOR I VEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
JUPITER	1.10	178.32	36.26	21.45	1.86
IMPROVED PELICAN	1.15	192.95	32.31	17.52	1.50
DAVIS	1.17	189.28	24.98	19.71	1.32
COLUMBUS	1.19	175.85	26.91	19.89	1.94
HARDEE	1.10	156.80	31.20	19.12	2.22
FORREST	1.10	180.60	27.03	17.68	1.83
HAMPTON 266A	1.17	177.72	25.55	22.61	2.50
WILLIAMS	1.10	170.36	23.50	19.92	1.92
BOSSLER	1.15	165.28	25.23	19.35	1.92
TRACY	1.27	173.33	20.90	19.87	2.03
COBB	1.15	129.42	27.01	19.83	2.25
WOODWORTH	1.15	140.13	24.73	17.88	1.86
GRAND MEAN	1.15	169.17	27.14	19.57	1.98
NUMBER EXPERIMENTS CONTRIBUTING	12	15	15	15	9
STANDARD ERROR OF VARIETY MEAN	0.04	7.49	1.62	0.49	0.18
COEFFICIENT OF VARIATION	26.64%	34.29%	46.34%	19.27%	53.99%
5% LSD VARIETY MEANS (*****NS)	*****	20.92	4.54	1.36	0.50
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.19++	0.20++	0.33++	0.32++	0.03
DAYS TO FLOWER	576	720	720	720	432
DAYS TO MATURITY	0.57++	-0.11++	0.07+	0.02	-0.23++
	576	720	720	720	432
NODULE NUMBER 1	0.19++	-0.00	0.12++	0.25++	-0.12+
	576	720	720	720	432
NODULE NUMBER 2	0.23++	0.01	0.17++	-0.34++	-0.13+
	432	576	576	576	384
NODULE WEIGHT 1	0.09	-0.11++	0.14++	-0.16++	-0.07
	432	576	576	576	384
NODULE WEIGHT 2	0.34++	-0.04	0.17++	-0.19++	-0.12+
	384	480	480	480	288
PLANT HEIGHT	0.28++	-0.07	0.09	-0.11+	-0.22++
	384	480	480	480	288
LODGING	-0.21++	0.00	0.41++	0.05	-0.10+
	576	720	720	720	432
SHATTER	0.15++	-0.01	0.23++	0.14++	-0.12+
	576	624	624	624	384
HARVEST	1.00	-0.12++	-0.02	0.03	-0.10
	576	576	576	576	336
PODS PER PLANT	-0.12++	1.00	-0.35++	-0.18++	-0.17++
	576	720	720	720	432
100 SEED WEIGHT	-0.02	-0.35++	1.00	0.05	0.05
	576	720	720	720	432
QUALITY OF SEED	0.03	-0.18++	0.05	1.00	0.27++
	576	720	720	720	432
	-0.10	-0.17++	0.05	0.27++	1.00
	336	432	432	432	432

TABLE 46 COMBINED ANALYSIS OF SITES IN ZONE II FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
JUPTER	2393.63	42.20	111.70	286.63	142.00	4.15	1.65	57.25	1.00
IMPROVED PELICAN	1990.75	42.10	100.90	272.88	97.00	2.68	1.13	44.75	1.31
DAVIS	1838.73	40.20	99.05	511.75	134.50	5.68	1.53	27.50	1.00
FORREST	1569.67	39.30	98.05	196.38	101.25	3.76	0.90	29.95	1.06
HARDEE	1522.33	41.85	102.80	345.63	139.00	4.44	1.05	24.35	1.00
BOSSIER	1459.82	36.25	96.10	276.25	124.75	3.02	1.43	22.95	1.00
HAMPTON 266A	1420.23	36.30	94.10	280.25	88.25	2.68	1.00	20.00	1.00
COLUMBUS	1358.51	36.05	97.25	316.88	160.00	4.40	2.13	33.45	1.06
WILLIAMS	1347.88	36.50	94.35	179.63	132.75	1.75	1.63	31.15	1.19
TRACY	1154.47	36.10	87.80	153.88	133.25	2.57	1.83	23.45	1.00
GRAND MEAN	1605.60	38.69	98.21	282.01	125.28	3.51	1.42	31.48	1.06
NUMBER EXPERIMENTS CONTRIBUTING	5	5	5	2	1	2	1	5	4
STANDARD ERROR OF VARIETY MEAN	174.43	0.99	3.41	107.27	15.83	1.31	0.21	4.12	0.10
COEFFICIENT OF VARIATION	48.58%	11.43%	15.54%	107.59%	25.27%	105.46%	30.13%	58.48%	36.56%
5% LSD VARIETY MEANS (****=NS)	500.30	2.84	9.79	*****	*****	*****	0.62	11.81	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)									
YIELD	1.00	-0.36++	0.13	-0.11	-0.12	-0.22	-0.11	0.71++	0.28++
DAYS TO FLOWER	200	200	200	80	40	80	40	200	160
DAYS TO MATURITY	-0.36++	1.00	0.46++	0.53++	-0.18	0.67++	-0.37+	-0.18+	-0.19+
NODULE NUMBER 1	0.13	0.46++	1.00	0.32++	0.16	0.32++	-0.02	200	160
NODULE NUMBER 2	200	200	200	80	40	80	40	200	160
NODULE WEIGHT 1	-0.11	0.53++	0.32++	1.00	0.44++	0.80++	0.50++	-0.11	-0.16
NODULE WEIGHT 2	80	80	80	80	40	80	40	80	80
PLANT HEIGHT	-0.12	-0.18	0.16	0.44++	1.00	0.40+	0.81++	0.05	-0.09
LODGING	-0.22	0.67++	0.32++	0.80++	0.40+	1.00	0.57++	-0.10	-0.19
SHATTER	-0.11	-0.37+	-0.02	0.50++	0.81++	0.57++	1.00	0.09	-0.01
PLANTS HARVEST	0.71++	-0.18+	0.36++	-0.11	0.05	-0.10	0.09	40	40
PODS PER PLANT	200	200	200	80	40	80	40	200	160
100 SEED WEIGHT	0.28++	-0.19+	-0.03	-0.16	-0.09	-0.19	-0.01	0.40++	1.00
QUALITY OF SEED	160	160	160	80	40	80	40	160	160
	-0.21++	-0.07	-0.16+	-0.12	0.08	-0.18	0.20	-0.22++	-0.07
	160	160	160	80	40	80	40	160	160
	0.60++	-0.81++	-0.40++	-0.49++	0.00	-0.64++	-0.01	0.40++	0.29++
	200	200	200	80	40	80	40	200	160
	0.57++	-0.59++	0.05	-0.36++	0.02	-0.45++	-0.10	0.56++	0.19+
	160	160	160	80	40	80	40	160	120
	0.18+	-0.05	-0.08	0.31++	0.06	0.22	0.21	0.08	-0.12
	160	160	160	80	40	80	40	160	160
	0.23+	-0.31++	-0.03	-0.23+	0.27	-0.14	0.40+	0.17	0.07
	120	120	120	80	40	80	40	120	120

TABLE 46 COMBINED ANALYSIS OF SITES IN ZONE II FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
JUPITER	1.00	94.20	26.14	22.89	2.83
IMPROVED PELICAN	1.00	127.50	17.43	17.65	1.58
DAVIS	1.00	114.45	10.91	20.83	2.08
FORREST	1.00	113.95	13.45	19.25	2.00
HARDEE	1.00	78.60	18.21	19.51	2.33
BOSSIER	1.19	90.30	15.64	21.01	2.03
HAMPTON 266A	1.00	99.75	11.64	23.46	2.58
COLUMBUS	1.00	97.45	11.69	22.34	2.42
WILLIAMS	1.25	100.95	10.26	22.11	1.83
TRACY	1.63	103.40	9.98	21.53	2.75
GRAND MEAN	1.11	102.06	14.53	21.06	2.25
NUMBER EXPERIMENTS CONTRIBUTING	4	5	4	4	3
STANDARD ERROR OF VARIETY MEAN	0.17	7.46	2.63	1.39	0.39
COEFFICIENT OF VARIATION	62.77%	32.67%	72.40%	26.48%	60.34%
5% LSD VARIETY MEANS (*****NS)	*****	21.39	7.63	*****	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.21++	0.60++	0.57++	0.18+	0.23+
DAYS TO FLOWER	160	200	160	160	120
	-0.07	-0.81++	-0.59++	-0.05	-0.31++
DAYS TO MATURITY	160	200	160	160	120
	-0.16+	-0.40++	0.05	-0.08	-0.03
NODULE NUMBER 1	160	200	160	160	120
	-0.12	-0.49++	-0.36++	0.31++	-0.23+
NODULE NUMBER 2	80	80	80	80	80
	0.08	0.00	0.02	0.06	0.27
NODULE WEIGHT 1	40	40	40	40	40
	-0.18	-0.64++	-0.45++	0.22	-0.14
NODULE WEIGHT 2	80	80	80	80	80
	0.20	-0.01	-0.10	0.21	0.40+
PLANT HEIGHT	40	40	40	40	40
	-0.22++	0.40++	0.56++	0.08	0.17
LODGING	160	200	160	160	120
	-0.07	0.29++	0.19+	-0.12	0.07
SHATTER	160	160	120	160	120
	1.00	-0.13	-0.06	0.11	-0.05
PLANTS HARVEST	160	160	120	160	120
	-0.13	1.00	0.57++	0.01	0.29++
PODS PER PLANT	160	200	160	160	120
	-0.06	0.57++	1.00	-0.08	0.25++
100 SEED WEIGHT	120	160	160	120	120
	0.11	0.01	-0.08	1.00	-0.09
QUALITY OF SEED	160	160	120	160	120
	-0.05	0.29++	0.25++	-0.09	1.00
	120	120	120	120	120



TABLE 47 COMBINED ANALYSIS OF SITES IN ZONE III FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
BOSSIER	1520.22	53.81	122.88	215.44	283.94	3.05	5.46	43.29	1.00
DAVIS	1509.41	56.94	121.25	191.88	258.38	2.36	4.63	40.37	1.00
WILLIAMS	1496.89	39.31	115.63	253.88	248.25	2.97	4.34	33.05	1.00
FORREST	1480.55	51.44	123.06	234.75	283.56	2.37	4.60	46.17	1.00
HARDEF	1375.48	64.44	133.13	169.31	356.56	2.27	5.89	44.23	1.00
IMPROVED PELICAN	1275.22	64.13	133.19	227.88	247.25	2.86	4.58	64.91	1.17
COLUMBUS	1139.95	44.31	122.06	325.63	334.94	4.03	6.39	39.41	1.25
TEACY	1098.07	45.69	118.88	199.50	212.81	2.74	3.76	27.46	1.00
HAMPTON 266A	1009.29	50.63	121.00	276.63	349.63	2.84	5.22	30.12	1.00
GRAND MEAN	1322.79	52.30	123.45	232.76	286.15	2.83	4.98	41.00	1.05
NUMBER EXPERIMENTS CONTRIBUTING	5	4	4	4	4	3	3	4	3
STANDARD ERROR OF VARIETY MEAN	197.38	5.13	3.79	35.33	41.42	0.32	0.63	4.39	0.09
COEFFICIENT OF VARIATION	66.73%	39.26%	12.29%	60.71%	57.90%	39.43%	43.94%	42.78%	31.19%
5% LSD VARIETY MEANS (*****NS)	*****	14.98	11.07	*****	*****	0.97	*****	12.80	*****

CORRELATIONS AND NUMBER OF OBSERVATIONS (* - PROB=.05, ** - PROB=.01)									
YIELD	KG/HA	1.00	-0.24**	-0.1d*	0.32**	0.46**	-0.08	0.38**	-0.38**
DAYS TO FLOWER	180	144	144	144	144	144	108	108	144
DAYS TO MATURITY	144	144	144	144	144	144	108	108	108
NODULE NUMBER 1	144	144	144	144	144	144	108	108	108
NODULE NUMBER 2	144	144	144	144	144	144	108	108	108
NODULE WEIGHT 1	108	108	108	108	108	108	108	108	108
NODULE WEIGHT 2	108	108	108	108	108	108	108	108	108
PLANT HEIGHT	108	108	108	108	108	108	108	108	108
LODGING	108	108	108	108	108	108	108	108	108
SHATTER	108	108	108	108	108	108	108	108	108
PLANTS HARVEST	108	108	108	108	108	108	108	108	108
PODS PER PLANT	108	108	108	108	108	108	108	108	108
100 SEED WEIGHT	108	108	108	108	108	108	108	108	108
QUALITY OF SEED	108	108	108	108	108	108	108	108	108

TABLE 47 COMBINED ANALYSIS OF SITES IN ZONE III FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
BOSSIER	1.44	167.50	24.14	15.85	2.55
DAVIS	1.38	174.00	22.17	17.28	2.75
WILLIAMS	1.31	165.00	21.01	19.04	1.90
FORREST	1.25	174.06	23.19	16.42	2.55
HARDEE	1.25	146.06	32.68	15.43	2.70
IMPROVED PELICAN	1.50	181.50	20.60	14.17	2.85
COLUMBUS	1.19	166.31	23.91	16.29	3.15
TRACY	1.50	153.63	18.03	16.53	2.15
HAMPTON 266A	1.25	167.88	17.48	17.62	3.10
GRAND MEAN	1.34	166.22	22.58	16.51	2.63
NUMBER EXPERIMENTS CONTRIBUTING	4	4	3	5	5
STANDARD ERROR OF VARIETY MEAN	0.15	10.35	2.03	0.97	0.31
COEFFICIENT OF VARIATION	44.73%	24.90%	31.20%	26.36%	53.10%
5% LSD VARIETY MEANS (****=NS)	*****	*****	6.10	*****	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	0.01	-0.10	0.44++	0.46++	-0.41++
DAYS TO FLOWER	144	144	108	180	180
DAYS TO MATURITY	0.46++	0.45++	-0.24+	-0.13	0.31++
	108	108	108	144	144
NODULE NUMBER 1	0.60++	0.42++	-0.22+	0.13	0.24++
	108	108	108	144	144
NODULE NUMBER 2	0.50++	0.38++	-0.21+	0.36++	0.03
	108	108	108	144	144
NODULE WEIGHT 1	0.55++	0.26++	-0.03	0.35++	-0.11
	108	108	108	144	144
NODULE WEIGHT 2	0.32++	0.59++	-0.56++	-0.36++	0.28++
	72	72	72	108	108
PLANT	0.24+	0.48++	-0.36++	-0.11	-0.06
	72	72	72	108	108
PLANT HEIGHT	0.40++	0.29++	-0.13	-0.17+	0.40++
	144	144	108	144	144
LODGING	-0.08	0.14	0.00	0.12	0.02
SHATTER	108	108	72	108	108
	1.00	-0.02	-0.08	0.26++	0.09
PLANTS HARVEST	144	144	108	144	144
	-0.02	1.00	-0.57++	-0.09	0.04
PODS PER PLANT	144	144	108	144	144
	-0.08	-0.57++	1.00	0.39++	-0.26++
100 SEED WEIGHT	108	108	108	108	108
	0.26++	-0.09	0.39++	1.00	-0.40++
QUALITY OF SEED	144	144	108	180	180
	0.09	0.04	-0.26++	-0.40++	1.00
	144	144	108	180	180

TABLE 48 COMBINED ANALYSIS OF SITES IN ZONE IV FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
DAVIS	2065.45	33.05	98.21	134.58	238.48	1.18	3.50	35.93	1.10
COLUMBUS	1960.94	29.04	89.68	127.37	225.43	0.89	3.06	44.92	1.28
FORREST	1956.10	31.39	94.71	132.25	219.47	1.02	2.86	36.77	1.08
JUPITER	1953.72	43.78	109.64	200.77	320.70	1.81	4.04	67.69	1.67
WILLIAMS	1839.25	28.97	87.21	130.00	221.23	0.96	3.34	43.13	1.28
HAMPTON 266A	1821.18	32.11	98.04	163.15	290.87	1.12	2.93	32.62	1.10
BOSSIER	1795.37	31.14	97.39	139.67	225.20	0.95	2.99	31.95	1.05
COBB	1714.56	32.18	99.16	107.13	195.80	0.89	2.40	33.27	1.07
TRACY	1623.77	30.01	86.54	156.67	217.65	1.03	3.26	31.40	1.12
CLARK 63	1584.62	29.03	89.24	127.97	194.45	0.86	2.79	40.51	1.43
GRAND MEAN	1831.49	32.07	94.98	141.96	234.93	1.07	3.12	39.82	1.22
NUMBER EXPERIMENTS CONTRIBUTING	21	19	20	15	15	13	12	21	15
STANDARD ERROR OF VARIETY MEAN	93.89	0.85	1.49	16.31	32.76	0.17	0.34	1.48	0.09
COEFFICIENT OF VARIATION	46.99%	23.16%	14.03%	89.02%	108.01%	113.75%	75.22%	34.14%	57.11%
5% LSD VARIETY MEANS (****=NS)	262.02	2.38	4.16	45.66	*****	0.47	*****	4.14	0.25
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)									
YIELD	KG/HA	1.00	0.17++	0.22++	0.12++	-0.02	0.07	0.38++	-0.04
DAYS TO FLOWER	760	0.17++	1.00	0.49++	0.09+	0.14++	0.00	0.33++	-0.04
DAYS TO MATURITY	760	0.22++	0.49++	1.00	-0.04	0.09+	-0.10+	0.35++	0.04
NODULE NUMBER 1	800	0.12++	0.09+	-0.04	1.00	0.81++	0.50++	0.10+	0.00
NODULE NUMBER 2	600	0.29++	0.05	0.09+	0.71++	0.49++	0.56++	0.21++	0.08
NODULE WEIGHT 1	520	-0.02	0.14++	-0.10+	0.81++	1.00	0.58++	-0.04	-0.05
NODULE WEIGHT 2	520	0.07	0.33++	0.35++	0.50++	0.50++	0.30	-0.07	-0.11+
PLANT HEIGHT	840	0.38++	0.33++	0.35++	0.10+	-0.04	-0.07	1.00	0.24++
LODGING	600	-0.04	-0.04	0.04	0.00	0.08	0.30	0.24++	1.00
SHATTER	600	-0.17++	-0.04	0.11++	-0.03	0.12+	0.23++	-0.15++	-0.06
PLANTS HARVEST	600	0.31++	-0.09+	0.13++	0.19++	0.15++	-0.33	0.07+	0.05
PODS PER PLANT	760	0.45++	0.32++	0.21++	-0.06	-0.16++	-0.19++	0.52++	0.03
100 SEED WEIGHT	760	0.32++	-0.07	0.21++	-0.15++	-0.15++	-0.26++	0.04	0.14++
QUALITY OF SEED	680	-0.24++	0.11++	0.26++	0.04	0.04	-0.07	-0.17++	0.02

TABLE 48 COMBINED ANALYSIS OF SITES IN ZONE IV FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
DAVIS	1.22	166.71	27.85	17.03	2.35
COLUMBUS	1.10	158.90	25.38	17.27	2.40
FORREST	1.02	159.64	30.51	15.03	2.85
JUPITER	1.13	148.39	40.04	16.85	2.87
WILLIAMS	1.10	154.95	23.36	18.40	2.29
HAMPTON 266A	1.40	156.63	26.80	19.24	2.97
BOSSIER	1.13	149.24	28.81	17.47	2.85
COBB	1.47	145.18	27.91	17.61	2.84
TRACY	1.22	155.55	22.20	17.91	2.75
CLARK 63	1.23	129.64	27.06	16.86	2.63
GRAND MEAN	1.20	152.48	27.99	17.37	2.68
NUMBER EXPERIMENTS CONTRIBUTING	15	21	19	19	17
STANDARD ERROR OF VARIETY MEAN	0.11	4.40	1.39	0.40	0.15
COEFFICIENT OF VARIATION	68.80%	26.42%	43.27%	20.30%	45.16%
5% LSD VARIETY MEANS (*****=NS)	*****	12.27	3.86	1.13	0.41
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.17++	0.31++	0.45++	0.32++	-0.24++
DAYS TO FLOWER	-0.04	-0.09+	0.32++	-0.07	0.11++
DAYS TO MATURITY	0.11++	0.19++	0.21++	0.21++	0.25++
NODULE NUMBER 1	-0.03	0.19++	-0.06	-0.15++	0.04
NODULE NUMBER 2	-0.06	0.27++	-0.01	-0.02	-0.02
NODULE WEIGHT 1	0.12+	0.15++	-0.16++	-0.15++	0.04
NODULE WEIGHT 2	0.23++	-0.03	-0.19++	-0.26++	-0.07
PLANT HEIGHT	-0.15++	0.07+	0.52++	0.04	-0.17++
LODGING	-0.06	0.05	0.03	0.14++	0.02
SHATTER	1.00	-0.16++	-0.08	-0.15++	-0.03
PLANTS HARVEST	-0.16++	1.00	-0.20++	0.30++	-0.06
PODS PER PLANT	-0.08	-0.20++	1.00	-0.00	-0.15++
100 SEED WEIGHT	-0.15++	0.30++	-0.00	1.00	-0.03
QUALITY OF SEED	-0.03	-0.06	-0.15++	-0.03	1.00
	520	680	640	680	680



TABLE 49 COMBINED ANALYSIS OF AFRICAN SITES IN ZONE IV FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
DAVIS	1748.97	31.50	92.72	181.38	257.88	1.70	4.37	30.70	1.25
COBB	1702.84	31.59	92.39	154.67	273.54	1.33	3.34	32.05	1.13
JUPITER	1697.17	41.16	102.28	319.38	380.29	2.62	4.97	63.87	1.38
FORREST	1695.55	30.22	88.14	200.00	292.71	1.62	3.46	31.13	1.13
BOSSIER	1615.03	29.31	88.25	207.17	278.58	1.42	3.69	26.86	1.08
COLUMBUS	1601.45	28.63	85.39	197.33	299.54	1.34	3.93	33.86	1.13
WILLIAMS	1588.36	28.50	84.39	188.88	314.63	1.47	4.86	38.95	1.08
HAMPTON 266A	1566.65	30.72	91.67	216.50	354.13	1.52	4.76	28.54	1.17
CALLARD	1470.50	28.47	84.00	216.17	292.13	1.81	4.23	40.74	1.17
WOODWORTH	1440.58	28.47	79.44	142.13	168.96	1.00	2.82	37.92	1.21
CLARK 63	1406.74	28.34	85.14	186.75	295.96	1.32	4.13	36.68	1.21
TRACY	1366.90	29.41	81.64	252.67	297.33	1.51	4.52	28.40	1.21
GRAND MEAN	1575.06	30.53	87.95	205.25	292.14	1.56	4.01	36.31	1.18
NUMBER EXPERIMENTS CONTRIBUTING	10	8	9	6	6	6	5	10	6
STANDARD ERROR OF VARIETY MEAN	104.58	1.30	1.68	38.99	56.97	0.33	0.67	1.00	0.10
COEFFICIENT OF VARIATION	41.99%	24.14%	11.47%	93.05%	95.54%	105.35%	75.27%	27.88%	42.88%
5% LSD VARIETY MEANS (*****=NS)	*****	3.67	4.73	*****	*****	*****	*****	4.49	*****

CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=-.05, ++ - PROR=-.01)									
YIELD	KG/HA	1.00							
DAYS TO FLOWER		-0.17++	1.00						
DAYS TO MATURITY		0.25++	0.14+	1.00					
NODULE NUMBER 1		0.17++	0.11+	-0.11+	1.00				
NODULE NUMBER 2		0.26++	0.06	0.04	0.29++	1.00			
NODULE WEIGHT 1		0.24++	0.06	0.04	0.46++	0.26++	1.00		
NODULE WEIGHT 2		0.23++	0.05	0.03	0.43++	0.52++	0.27++	1.00	
PLANT HEIGHT		0.29++	0.06	0.03	0.24++	0.13+	0.27++	0.29++	1.00
LODGING		0.19++	0.06	0.06	0.13+	-0.04	-0.13	0.29++	0.00
SHATTER		-0.32++	0.04	0.37++	-0.01	0.05	0.11	0.07	-0.04
PLANTS HARVEST		0.23++	-0.15++	0.15+	0.30++	0.18++	-0.20++	-0.13++	0.27++
PODS PER PLANT		0.58++	0.07	-0.19++	0.06	-0.02	0.07	0.41++	0.04
100 SEED WEIGHT		0.44++	0.04	0.24++	0.17++	-0.19++	-0.18++	-0.25++	0.00
QUALITY OF SEED		-0.31++	0.19++	0.24++	0.13	0.20++	0.01	-0.05	-0.04
		288	240	240	288	240	240	288	192

TABLE 49 COMBINED ANALYSIS OF AFRICAN SITES IN ZONE IV FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
DAVIS	1.08	150.90	23.10	16.52	2.33
COBB	1.46	145.98	28.02	15.84	2.96
JUPITER	1.33	141.15	40.47	15.18	2.96
FORREST	1.00	144.65	25.70	13.80	3.17
BOSSIER	1.21	139.10	23.71	16.11	2.75
COLUMBUS	1.13	145.93	20.24	16.26	2.38
WILLIAMS	1.21	140.78	20.62	18.09	2.08
HAMPTON 266A	1.50	145.95	22.96	17.49	3.04
CALLAND	1.04	146.50	21.70	17.45	3.13
WOODWORTH	1.13	143.20	19.89	16.42	2.25
CLARK 63	1.17	131.25	19.68	16.49	2.54
TRACY	1.17	143.65	19.10	16.81	2.46
GRAND MEAN	1.20	143.25	23.77	16.37	2.67
NUMBER EXPERIMENTS CONTRIBUTING	6	10	8	8	6
STANDARD ERROR OF VARIETY MEAN	0.20	2.53	1.77	0.54	0.20
COEFFICIENT OF VARIATION	80.65%	11.15%	42.21%	18.57%	36.15%
5% LSD VARIETY MEANS (****=NS)	*****	7.02	4.99	1.51	0.56
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.32++	0.23++	0.58++	0.44++	-0.31++
DAYS TO FLOWER	288	480	384	384	288
	0.04	-0.15++	0.07	0.04	0.19++
DAYS TO MATURITY	240	384	288	336	240
	0.37++	0.15++	-0.19++	0.24++	0.24++
NODULE NUMBER 1	288	432	336	336	240
	-0.01	0.30++	0.06	-0.17++	0.13
NODULE NUMBER 2	240	288	240	288	240
	-0.12	0.53++	0.07	0.18++	-0.11
NODULE WEIGHT 1	192	288	240	288	288
	0.05	0.18++	-0.02	-0.19++	0.20++
NODULE WEIGHT 2	240	288	240	288	240
	0.11	-0.20++	0.07	-0.18++	0.01
PLANT HEIGHT	192	240	192	240	240
	0.07	-0.13++	0.41++	-0.25++	-0.05
LODGING	288	480	384	384	288
	-0.04	0.27++	0.04	0.00	-0.04
SHATTER	288	288	288	240	192
	1.00	-0.36++	0.03	-0.27++	0.28++
PLANTS HARVEST	288	288	240	240	192
	-0.36++	1.00	-0.16++	0.35++	-0.22++
PODS PER PLANT	288	480	384	384	288
	0.03	-0.16++	1.00	-0.14+	0.04
100 SEED WEIGHT	288	384	384	288	240
	-0.27++	0.35++	-0.14+	1.00	-0.36++
QUALITY OF SEED	240	384	384	384	288
	0.28++	-0.22++	0.04	-0.36++	1.00
	192	288	240	288	288

TABLE 50 COMBINED ANALYSIS OF CENT. &amp; SO. AMERICAN SITES IN ZONE IV FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
JUPITER	2754.24	46.89	122.32	169.45	391.15	1.65	4.36	80.51	1.83
DAVIS	2747.10	33.75	106.39	133.20	283.40	0.97	3.38	44.30	1.00
COLUMBUS	2631.72	28.71	92.64	97.35	184.35	0.74	2.70	54.26	1.38
FORREST	2603.44	31.57	105.21	104.25	186.75	0.64	3.02	44.19	1.00
HARDEE	2574.74	36.61	110.46	144.30	340.00	1.21	4.10	48.94	1.17
IMPROVED PELICAN	2454.72	41.86	122.80	122.80	295.95	0.98	3.36	80.01	2.13
HAMPTON 266A	2452.54	32.71	108.75	150.55	292.75	1.04	2.66	39.94	1.04
WILLIAMS	2299.10	28.75	88.43	102.90	156.70	0.74	2.52	49.99	1.42
BOSSIER	2190.82	32.57	111.85	115.00	200.00	0.74	2.71	41.53	1.04
TRACY	2109.74	30.00	90.93	104.20	150.10	0.80	2.34	36.54	1.00
COBB	1975.21	32.36	111.36	83.10	141.95	0.56	1.79	35.45	1.04
CLARK 63	1954.16	28.61	92.04	108.80	146.40	0.72	2.13	47.12	1.63
WOODWORTH	1939.47	28.43	86.64	83.00	112.80	0.77	1.69	46.26	1.46
GRAND MEAN	2360.54	33.29	102.85	116.84	221.72	0.89	2.83	49.93	1.32
NUMBER EXPERIMENTS CONTRIBUTING	7	7	7	5	5	4	4	7	6
STANDARD ERROR OF VARIETY MEAN	196.26	1.65	2.82	19.62	74.82	0.22	0.56	3.97	0.20
COEFFICIENT OF VARIATION	44.44%	26.22%	14.53%	75.08%	150.91%	98.93%	79.04%	42.03%	72.61%
5% LSD VARIETY MEANS (****=NS)	558.93	4.65	7.96	*****	*****	*****	1.60	11.18	0.55
CORRELATIONS AND NUMBER OF OBSERVATIONS									
(+ - PROB=-.05, ++ - PROB=-.01)									
YIELD	1.00	0.40++	0.17++	0.44++	0.38++	0.46++	0.56++	0.19++	-0.16++
DAYS TO FLOWER	364	364	364	260	260	208	208	364	312
DAYS TO MATURITY	0.40++	1.00	0.63++	0.46++	0.44++	0.62++	0.51++	0.51++	0.02
NODULE NUMBER 1	0.17++	364	1.00	0.30++	0.38++	0.11	0.20++	364	312
NODULE NUMBER 2	0.46++	0.40++	0.30++	260	260	208	0.62++	364	312
NODULE WEIGHT 1	0.38++	0.44++	0.38++	0.77++	1.00	0.56++	0.64++	260	-0.23++
NODULE WEIGHT 2	0.40++	0.62++	0.11	0.70++	0.56++	1.00	0.65++	260	-0.18+
PLANT HEIGHT	0.19++	0.51++	0.33++	-0.00	0.15+	0.65++	1.00	208	-0.24++
LOGGING	-0.16++	0.02	0.04	-0.23++	-0.05	-0.02	-0.00	208	0.39++
SHATTER	0.17++	0.10	0.17++	0.04	0.07	0.12	0.21++	364	312
PLANTS HARVEST	0.17++	0.03	0.14++	0.12+	0.15+	0.156	-0.24++	312	-0.14+
PODS PER PLANT	0.28++	0.46++	0.18++	-0.08	-0.05	0.07	0.11	364	312
100 SEED WEIGHT	0.03	364	364	260	260	208	0.49++	364	312
QUALITY OF SEED	-0.41++	-0.11+	0.12+	0.01	-0.04	-0.03	-0.10++	364	312
	364	364	364	260	260	208	0.40++	364	312

TABLE 50 COMBINED ANALYSIS OF CENT. & SO. AMERICAN SITES IN ZONE IV FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
JUPITER	1.00	163.61	33.83	19.94	3.00
DAVIS	1.33	186.25	34.55	18.37	2.64
COLUMBUS	1.00	173.71	32.41	18.24	2.54
FOREST	1.00	177.29	38.30	16.78	2.89
HARDEE	1.17	146.46	43.86	13.22	2.86
IMPROVED PELICAN	1.00	171.96	48.55	14.77	2.82
HAMPTON 266A	1.17	175.71	31.55	22.34	3.11
WILLIAMS	1.00	160.43	26.94	19.11	2.39
BOSSIER	1.08	165.50	33.22	19.50	3.21
TRACY	1.21	183.79	26.61	19.49	3.07
COBB	1.58	163.49	28.65	19.79	3.14
CLARK 63	1.21	141.79	32.85	17.47	2.93
WOODWORTH	1.04	160.07	29.18	17.19	2.82
GRAND MEAN	1.14	169.27	34.27	18.55	2.38
NUMBER EXPERIMENTS CONTRIBUTING	6	7	7	7	7
STANDARD ERROR OF VARIETY MEAN	0.15	9.24	2.56	0.70	0.30
COEFFICIENT OF VARIATION	63.06%	23.89%	39.47%	20.06%	55.11%
5% LSD VARIETY MEANS (*****=NS)	*****	26.06	7.21	1.96	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	0.17++	0.17++	0.28++	0.03	-0.41++
DAYS TO FLOWER	0.10	0.03	0.36++	-0.31++	-0.11+
DAYS TO MATURITY	0.17++	0.14++	0.18++	-0.01	0.12+
NODULE NUMBER 1	0.04	0.12+	-0.08	-0.14+	0.01
NODULE NUMBER 2	0.07	0.15+	-0.05	-0.03	-0.04
NODULE WEIGHT 1	0.12	-0.24++	0.07	-0.31++	-0.03
NODULE WEIGHT 2	0.21++	-0.14+	0.11	-0.30++	-0.04
PLANT HEIGHT	-0.13+	0.09	0.49++	-0.18++	-0.40++
LOGGING	-0.14+	-0.14+	0.24++	0.12+	0.08
SHATTER	1.00	-0.05	0.09	-0.03	-0.16++
PLANTS HARVEST	-0.05	1.00	-0.40++	0.14++	-0.02
PODS PER PLANT	0.09	-0.40++	1.00	-0.23++	-0.38++
100 SEED WEIGHT	-0.03	0.14++	-0.23++	1.00	0.05
QUALITY OF SEED	-0.16++	-0.02	-0.38++	0.05	1.00
	312	364	364	364	364



TABLE 51 COMBINED ANALYSIS OF SITES IN ZONE VII FOR ISVEX-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
DAVIS	2325.19	44.68	103.14	118.50	242.42	0.00	3.43	41.04	1.45
BOSSIER	2190.80	41.04	108.61	138.63	274.58	0.00	2.68	44.73	1.25
FORREST	2189.25	35.00	59.14	187.00	269.08	0.00	3.15	39.10	1.15
HARDEE	2169.59	48.21	116.11	313.13	322.58	0.00	4.05	55.08	1.55
HAMPTON 266A	2118.02	39.46	109.07	206.25	250.42	0.00	2.45	41.78	1.30
COBB	1998.74	38.46	102.96	171.75	216.33	0.00	2.35	40.35	1.20
JUPIER	1945.31	53.86	126.75	223.88	256.25	0.00	3.38	34.38	1.90
WILLIAMS	1871.64	31.11	91.21	207.38	246.92	0.00	2.88	46.31	1.00
COLUMBUS	1826.04	32.14	95.68	240.63	290.08	0.00	3.43	52.13	1.10
TRACY	1741.76	35.36	95.75	212.38	291.08	0.00	2.13	36.13	1.35
CLARK 63	1682.57	31.18	94.21	153.00	214.92	0.00	3.13	46.52	1.10
IMPROVED PELICAN	1559.78	49.32	118.14	185.25	200.75	0.00	3.15	96.15	1.60
WOODWORTH	1538.01	32.04	88.86	187.50	195.25	0.00	2.13	41.17	1.35
GRAND MEAN	1935.13	39.37	103.82	195.79	251.59	0.00	2.38	50.58	1.33
NUMBER EXPERIMENTS CONTRIBUTING	7	7	7	2	3	0	1	7	5
STANDARD ERROR OF VARIETY MEAN	167.87	1.99	4.33	50.68	33.95	0.00	0.22	4.43	0.21
COEFFICIENT OF VARIATION	45.90%	26.80%	22.09%	73.22%	46.75%	0.00%	14.54%	46.35%	71.66%
5% LSD VARIETY MEANS (****=NS)	473.26	5.62	12.22	*****	*****	0.00	0.62	12.62	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS									
(+ - PROB=.05, ++ - PROB=.01)									
YIELD	1.00	0.11+	0.32++	0.37++	0.06	0.00	0.54++	0.23++	0.02
DAYS TO FLOWER	364	364	364	104	156	0	52	364	260
DAYS TO MATURITY	0.11+	1.00	0.71++	-0.30++	-0.36++	0.00	0.37++	0.50++	0.54++
NODULE NUMBER 1	0.32++	0.71++	1.00	-0.16	-0.29++	0.00	0.54++	0.54++	0.54++
NODULE NUMBER 2	0.37++	-0.30++	364	104	156	0	52	364	260
NODULE WEIGHT 1	0.06	-0.36++	-0.16	1.00	0.72++	0.00	0.30	0.16	-0.58++
NODULE WEIGHT 2	0.00	0.00	104	104	104	0	0	104	104
NODULE WEIGHT 2	0.54++	0.37++	0.54++	0.00	0.44++	1.00	0.00	-0.13+	-0.46++
PLANT HEIGHT	0.29++	0.50++	0.64++	0.16	-0.18+	0.00	0.46++	1.00	0.39++
LOGGING	0.02	0.54++	0.54++	-0.58++	-0.46++	0.00	0.00	364	260
SHATTER	-0.03	0.35++	0.34++	-0.54++	-0.53++	0.00	0.00	0.39++	1.00
PLANTS HARVEST	-0.09	0.04	-0.17++	-0.64++	-0.17+	0.00	0.04	260	260
PODS PER PLANT	0.50++	0.36++	0.62++	0.38++	0.04	0.00	0.37++	-0.22++	-0.11
100 SEED WEIGHT	0.09	0.11	0.18++	-0.62++	-0.09	0.00	0.45++	0.62++	0.16+
QUALITY OF SEED	-0.07	0.22++	0.30++	-0.09	-0.06	0.00	0.00	364	260
	260	260	260	104	104	0	0	312	260

TABLE 51 COMBINED ANALYSIS OF SITES IN ZONE VII FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
DAVIS	1.17	173.36	35.53	15.09	1.30
BOSSIER	1.00	153.18	39.44	12.98	1.70
FORREST	1.13	163.96	36.63	12.70	2.35
HARDEE	1.29	149.18	52.19	13.19	1.95
HAMPTON 266A	1.17	162.82	36.05	15.38	2.85
COBB	1.25	146.39	41.76	13.78	2.15
JUPITER	1.54	163.36	48.52	14.84	3.30
WILLIAMS	1.29	171.57	27.94	16.05	1.05
COLUMBUS	1.38	164.54	28.45	14.41	1.85
TRACY	1.50	161.32	36.67	13.67	1.95
CLARK 63	1.13	138.96	27.21	14.80	2.00
IMPROVED PELICAN	1.42	165.50	42.03	11.74	2.05
WOODWORTH	1.13	163.93	24.69	14.35	2.10
GRAND MEAN	1.26	161.39	36.70	14.08	2.13
NUMBER EXPERIMENTS CONTRIBUTING	6	7	7	6	5
STANDARD ERROR OF VARIETY MEAN	0.16	9.66	5.95	0.72	0.34
COEFFICIENT OF VARIATION	60.28%	31.69%	85.72%	25.20%	71.38%
5% LSD VARIETY MEANS (****=NS)	*****	*****	16.76	2.05	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.03	-0.09	0.50++	0.09	-0.07
DAYS TO FLOWER	312	364	364	312	260
	0.35++	0.04	0.36++	0.11	0.22++
DAYS TO MATURITY	312	364	364	312	260
	0.34++	-0.17++	0.62++	0.18++	0.30++
NODULE NUMBER 1	312	364	364	312	260
	-0.54++	-0.64++	0.38++	-0.62++	-0.09
NODULE NUMBER 2	104	104	104	104	104
	-0.53++	-0.17+	0.04	-0.09	-0.06
NODULE WEIGHT 1	156	156	156	156	104
	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0	0	0	0	0
	0.00	0.04	0.37++	0.45++	0.00
PLANT HEIGHT	52	52	52	52	0
	0.29++	-0.22++	0.62++	-0.21++	0.15+
LODGING	312	364	364	312	260
	0.58++	-0.11	0.16+	0.47++	0.22++
SHATTER	260	260	260	208	208
	1.00	-0.07	0.10	0.11	0.16+
PLANTS HARVEST	312	312	312	260	208
	-0.07	1.00	-0.52++	0.14+	0.05
PODS PER PLANT	312	364	364	312	260
	0.10	-0.52++	1.00	-0.21++	0.05
100 SEED WEIGHT	312	364	364	312	260
	0.11	0.14+	-0.21++	1.00	0.05
QUALITY OF SEED	260	312	312	312	260
	0.16+	0.05	0.05	0.05	1.00
	208	260	260	260	260

TABLE 52 COMBINED ANALYSIS OF SITES IN ZONE X FOR ISBEA-3

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
WILLIAMS	2605.19	43.53	115.47	195.00	259.38	1.09	1.39	86.23	1.65
CALLAND	2369.71	40.14	121.83	102.57	261.21	0.85	1.68	93.71	1.97
AMSOY 71	2286.75	37.13	111.69	141.54	174.54	0.54	0.45	79.58	1.94
HARK	2262.23	35.09	108.19	151.61	216.92	0.57	1.35	75.29	1.84
WOODWORTH	2223.95	42.83	112.47	155.86	161.29	0.99	1.80	79.36	1.84
BEESON	2211.15	36.56	111.75	126.04	160.67	1.00	1.58	77.31	1.84
COLUMBUS	2157.74	50.44	127.59	244.39	267.79	1.34	2.48	95.17	2.44
CORSOY	2113.91	36.75	110.06	141.75	210.58	0.94	1.52	74.44	1.84
WELLS	2102.91	36.47	108.97	137.64	196.29	0.90	1.64	74.29	1.50
HODGSON	2073.61	35.09	101.13	142.71	172.63	0.69	1.26	65.54	1.69
SWIFT	1616.10	35.34	97.63	128.66	166.29	0.89	1.57	67.81	1.94
ALTONA	1531.51	33.34	88.47	126.66	162.21	0.71	1.55	56.37	2.03
GRAND MEAN	2146.40	36.55	109.61	150.00	196.40	0.83	1.61	77.39	1.88
NUMBER EXPERIMENTS CONTRIBUTING	8	8	8	7	6	7	6	5	8
STANDARD ERROR OF VARIETY MEAN	132.91	1.39	2.57	17.50	24.33	0.10	0.20	2.71	0.21
COEFFICIENT OF VARIATION	35.03%	26.33%	13.25%	61.73%	60.21%	58.26%	61.88%	26.24%	62.06%
5% LSD VARIETY MEANS (*****NS)	374.30	3.90	7.23	49.41	69.10	0.27	0.57	7.73	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - P.05=0.5, ++ - P.01=0.1)									
YIELD	1.00	0.27++	0.55++	0.20++	0.07	0.58++	0.62++	0.75++	0.39++
DAYS TO FLOWER	364	384	384	336	288	336	236	334	384
DAYS TO MATURITY	0.27++	1.00	0.74++	0.26++	0.13+	0.38++	0.41++	0.59++	0.09
NODULE NUMBER 1	0.55++	0.74++	384	336	288	336	236	384	364
NODULE NUMBER 2	0.26++	0.26++	1.00	0.35++	0.09	0.55++	0.46++	0.40++	0.31++
NODULE WEIGHT 1	0.26++	0.26++	0.35++	1.00	0.47++	0.45++	0.28++	0.43++	0.35++
NODULE WEIGHT 2	0.07	0.13+	0.09	0.47++	1.00	0.12+	0.47++	0.17++	0.22++
PLANT HEIGHT	0.75++	0.59++	0.60++	0.43++	0.17++	0.55++	0.54++	1.00	0.43++
LODGING	0.39++	0.09	0.31++	0.35++	0.22++	0.44++	0.45++	0.43++	1.00
SHATTER	0.06	-0.06	-0.14++	0.00	0.00	0.00	0.00	-0.06	-0.08
HARVEST	0.23++	-0.12+	0.06	-0.12+	0.00	0.02	0.28++	0.07	0.15++
PLANTS PER	0.71++	0.31++	0.44++	0.03	0.02	0.47++	0.50++	0.53++	0.10
100 SEED WEIGHT	0.32++	-0.25++	0.03	-0.02	0.13+	-0.09	0.28++	0.17++	0.16++
QUALITY OF SEED	-0.62++	-0.03	384	336	236	336	288	384	384
	384	384	384	336	288	336	268	364	384

TABLE 52 COMBINED ANALYSIS OF SITES IN ZONE X FOR ISVEX-3

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
WILLIAMS	1.00	162.59	28.43	17.31	2.47
CALLAND	1.00	148.69	31.44	17.13	3.13
AMSOY 71	1.00	159.69	26.44	17.32	3.00
HARK	1.00	162.25	27.96	16.59	2.56
WOODWORTH	1.00	134.44	31.39	15.17	2.78
BEESON	1.00	160.34	25.46	17.63	3.25
COLUMBUS	1.00	150.97	32.58	15.23	2.50
CORSOY	1.00	166.84	28.80	15.24	2.84
WELLS	1.00	160.84	25.31	15.17	3.19
HODGSON	1.00	153.25	28.78	15.44	2.63
SWIFT	1.13	153.78	22.31	14.45	3.23
ALTONA	1.00	154.19	18.70	15.69	3.22
GRAND MEAN	1.01	155.66	27.30	16.03	2.90
NUMBER EXPERIMENTS CONTRIBUTING	8	8	7	8	d
STANDARD ERROR OF VARIETY MEAN	0.02	5.74	2.47	0.45	0.19
COEFFICIENT OF VARIATION	9.60%	20.84%	47.88%	15.82%	37.24%
5% LSD VARIETY MEANS (*****=NS)	0.05	16.15	6.97	1.26	0.54
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	0.06	0.23++	0.71++	0.32++	-0.62++
DAYS TO FLOWER	-0.06	-0.12+	0.31++	-0.25++	-0.03
DAYS TO MATURITY	-0.14++	0.08	0.44++	0.03	-0.20++
NODULE NUMBER 1	0.00	-0.12+	0.09	-0.02	-0.03
NODULE NUMBER 2	0.00	0.00	0.02	0.13+	0.11
NODULE WEIGHT 1	0.00	0.02	0.47++	-0.09	-0.46++
NODULE WEIGHT 2	0.00	0.28++	0.50++	0.26++	-0.27++
PLANT HEIGHT	-0.06	0.07	0.63++	0.17++	-0.34++
LODGING	-0.08	0.15++	0.10	0.16++	-0.15++
SHATTER	1.00	0.02	0.02	-0.06	-0.11+
PLANTS HARVEST	0.02	1.00	0.02	0.57++	-0.03
PODS PER PLANT	0.02	0.02	1.00	0.16++	-0.54++
100 SEED WEIGHT	-0.03	0.57++	0.16++	1.00	-0.03
QUALITY OF SEED	-0.11+	-0.06	-0.54++	-0.03	1.00
	384	384	336	384	384



TABLE 53 EXPERIMENT 398

YEAR 1975

REGION - AFRICA  
 SITE - KHEMIS-MILIANA  
 LATITUDE - 36 DEG. 15 MIN. N  
 CCOPEATOR - I.D.C.I.  
 DATE PLANTED - MAY 19, 1975  
 SOIL TYPE - SAND 15%, SILT 19%, CLAY 30%  
 FERTILIZER USED (KG/HA) - N 30.0, P 100.0, K 150.0  
 AMOUNT OF MOISTURE - 986 MM  
 NUMBER OF IRRIGATIONS - 29 (933 MM)

COUNTRY - ALGERIA  
 ELEVATION - 289 M  
 LONGITUDE - 2 DEG. 14 MIN. E  
 DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	PLANT HEIGHT	LOGGING
13	WILLIAMS	2374.22	76.00	121.00	161.00	238.00	1.60	1.98	34.50	1.00
15	BONUS	1809.95	65.00	120.50	114.50	124.00	1.43	1.10	80.50	1.00
14	CALLAND	1738.26	49.00	121.00	109.75	137.00	1.41	1.71	88.50	1.00
11	CLARK 63	1691.59	76.25	123.50	86.00	111.25	0.99	0.97	77.00	1.00
3	HARK	1519.05	45.50	120.00	70.00	97.00	0.85	0.81	62.75	1.00
4	HODGSON	1507.80	45.00	120.00	94.25	66.75	0.94	0.75	58.75	1.00
12	WOODWORTH	1505.30	60.00	120.00	103.75	156.25	1.32	1.36	69.75	1.00
5	AMSOY 71	1350.27	49.50	120.00	75.75	72.50	0.79	0.67	70.25	1.00
10	COLUMBUS	1266.09	85.00	134.00	96.00	129.25	0.91	0.97	99.25	1.00
2	SWIFT	873.51	43.00	120.00	55.75	109.75	0.65	0.87	60.00	1.00
9	FORREST	850.59	83.75	159.00	82.00	116.75	0.67	1.17	92.75	1.00
6	CORSOY	849.34	46.00	120.00	97.75	123.50	1.21	0.91	62.00	1.00
7	BEESON	815.58	46.25	120.00	85.25	92.50	1.17	1.10	72.75	1.00
8	WELLS	585.95	48.75	120.00	75.50	38.25	0.85	0.92	60.75	1.00
1	ALTONA	414.25	42.75	119.50	59.25	71.75	0.65	0.53	57.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****NS)										
C C R E I A T I O N S										
(+ - PROF= .05    ++ - PROF= .01)										
YIELD	KG/HA	1.00	0.24	-0.15	0.59++	0.61++	0.54++	0.53++	0.36++	0.00
DAYS TO FLOWER	0.24	1.00	0.64++	0.64++	0.26+	0.33++	0.03	0.20	0.62++	0.00
DAYS TO MATURITY	-0.15	0.64++	1.00	1.00	-0.04	0.34	-0.21	0.04	0.43++	0.00
NODULE NUMBER 1	0.59++	0.26+	-0.04	1.00	0.63++	1.00	0.75++	0.60++	0.32+	0.00
NODULE NUMBER 2	0.61++	0.33++	0.04	0.63++	0.75++	1.00	0.53++	0.74++	0.37++	0.00
NODULE WEIGHT 1	0.54++	0.03	-0.21	0.75++	0.53++	0.53++	1.00	0.65++	0.21	0.00
NODULE WEIGHT 2	0.59++	0.20	0.04	0.60++	0.74++	0.74++	0.65++	1.00	0.30+	0.00
PLANT HEIGHT	0.36++	0.62++	0.43++	0.32+	0.37++	0.37++	0.21	0.30+	1.00	0.00
LOGGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST	0.03	0.06	0.00	0.00	0.05	0.07	-0.05	0.00	0.00	0.00
PODS PER PLANT	0.67++	0.30+	0.07	0.53++	0.55++	0.43++	0.42+	0.42+	0.44++	0.00
100 SEED WEIGHT	0.37++	0.32+	0.40++	0.21	0.35++	0.15	0.30+	0.30+	0.26+	0.00
QUALITY OF SEED	-0.49++	-0.45++	-0.22	-0.32+	-0.40++	-0.31+	-0.23+	-0.23+	-0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 53 EXPERIMENT 398 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
13	WILLIAMS	1.00	146.50	40.00	12.39	2.25
15	BONUS	1.00	126.00	34.50	12.43	2.00
14	CALLAND	1.00	130.75	35.00	10.30	2.75
11	CLARK 63	1.00	131.25	35.25	9.51	2.50
3	HARK	1.00	136.25	27.00	11.71	3.25
4	HODGSON	1.00	143.50	28.75	10.29	3.25
12	WOODWORTH	1.00	123.25	24.25	10.50	2.50
5	AMSOY 71	1.00	130.00	33.50	10.21	2.75
10	COLUMBUS	1.00	142.25	29.00	10.19	2.25
2	SWIFT	1.00	134.75	21.25	8.76	3.00
9	PORREEST	1.00	141.50	29.50	13.87	2.50
6	CORSOY	1.00	144.50	33.25	9.19	3.25
7	BEESON	1.00	133.25	20.00	9.35	3.00
8	WELLS	1.00	127.25	17.50	8.12	3.75
1	ALTONA	1.00	138.25	15.00	10.58	4.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	135.28	28.25	10.49	2.87
COEFFICIENT OF VARIATION		0.00	6.01	4.00	0.87	0.34
5% LSD VARIETY MEANS (*****=NS)		0.00%	8.89%	28.32%	16.58%	23.71%
		0.00	*****	11.43	2.49	0.97
C C R R E L A T I O N S						
(+ - PROB=.05    +- - EROB=.01)						
YIELD	KG/HA	0.00	0.03	0.67++	0.37++	-0.49++
DAYS TO FLOWER		0.00	0.06	0.30+	0.32+	-0.45++
DAYS TO MATURITY		0.00	0.16	0.07	0.40++	-0.22
NODULE NUMBER 1		0.00	0.05	0.53++	0.21	-0.32+
NODULE NUMBER 2		0.00	0.07	0.55++	0.35++	-0.40++
NODULE WEIGHT 1		0.00	-0.05	0.43++	0.16	-0.31+
NODULE WEIGHT 2		0.00	-0.06	0.42++	0.30+	-0.29+
PLANT HEIGHT		0.00	0.13	0.44++	0.26+	-0.53++
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	-0.05	0.10	0.07
PLANTS PER PLANT		0.00	-0.05	1.00	0.34++	-0.52++
100 SEED WEIGHT		0.00	0.10	0.34++	1.00	-0.39++
QUALITY OF SEED		0.00	0.07	-0.52++	-0.39++	1.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00
						1.00

TABLE 54 EXPERIMENT 644 YEAR 1975

REGION - AFRICA COUNTRY - BURUNDI  
 SITE - EJOUMBUA ELEVATION - 780 M  
 LATITUDE - 3 DEG. 20 MIN. S LONGITUDE - 29 DEG. E  
 COORDINATORS - E. BONTI, D. CIMPAYE, E. MARCIN  
 DATE PLANTED - FEBRUARY 28, 1976 DATE HARVESTED - JUNE, 1976  
 SOIL TYPE - HEAVY GRAY CLAY, VERTISOL, PH ABOVE 7.  
 AMOUNT OF MOISTURE - 301 MM

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICGING
1	JUPITER	2848.49	64.75	118.00	417.50	0.00	6.93	0.00	67.00	1.00
2	DAVIS	2188.35	63.75	135.75	874.33	3.33	13.57	3.33	27.00	1.00
3	IMPROVED PELICAN	1455.29	61.00	102.50	402.75	0.00	4.44	0.00	16.75	1.00
4	BCSSIER	1347.35	60.25	97.50	398.25	3.33	5.19	3.33	18.25	1.00
5	FERREST	1271.09	60.25	97.50	289.75	0.00	6.66	0.00	25.25	1.00
6	CALLAND	1186.07	61.50	100.00	123.50	0.00	1.94	0.00	37.25	1.00
7	HAMPTON 266A	1179.43	63.75	135.75	414.33	0.00	4.55	0.00	18.00	1.00
8	COLUMBUS	1139.39	60.00	102.50	470.75	0.00	7.55	0.00	35.75	1.00
9	HAFDEE	1132.31	61.25	135.33	553.25	3.33	8.08	3.33	23.25	1.00
10	WILLIAMS	843.09	61.00	100.00	184.50	0.00	1.93	0.00	32.25	1.00
11	SEMMES	778.49	61.50	100.00	142.25	0.00	1.80	0.00	16.25	1.00
12	TRACY	713.98	63.75	97.53	122.75	3.33	3.91	3.33	17.00	1.00
13	GRAND MEAN	1340.02	61.15	102.67	366.10	0.00	5.29	0.00	27.83	1.00
14	STANDARD ERROR OF A VARIETY MEAN	109.93	0.63	2.94	56.80	0.03	1.93	0.33	0.98	0.33
15	COEFFICIENT OF VARIATION	16.41%	2.08%	5.72%	52.88%	0.00%	40.71%	0.00%	7.07%	0.00%
16	5% ISI VARIETY MEANS (*****=NS)	316.30	1.83	8.45	278.52	0.00	3.10	0.00	2.83	0.00

CORRELATION COEFFICIENTS									
YIELD	KG/HA	0.47++	0.57++	0.47++	0.00	0.43++	0.00	0.48++	0.00
DAYS TO FLOWER	1.33	0.42++	0.42++	0.06	0.33	-0.03	0.00	0.58++	0.00
DAYS TO MATURITY	0.57++	0.42++	1.00	0.25	0.00	0.15	0.00	0.53++	0.00
NODULE NUMBER 1	0.47++	-0.06	0.25	1.00	0.00	0.75++	0.00	0.07	0.00
NODULE NUMBER 2	0.33	0.33	0.33	0.33	1.00	0.33	0.33	0.33	0.33
NODULE WEIGHT 1	0.43++	-0.03	0.15	0.75++	0.00	1.00	0.00	0.15	0.00
NODULE WEIGHT 2	0.33	0.33	0.33	0.33	1.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.68++	0.58++	0.53++	0.07	0.00	0.15	0.00	1.00	0.00
ICGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.33	0.33	0.33	1.00	0.33	0.33	0.33	0.33
HARVEST	0.19	-0.10	-0.05	0.15	0.00	0.04	0.00	-0.05	0.00
PLANTS PER PLANT	9.80++	0.63++	0.64++	0.29+	0.33	0.33+	0.33	0.75++	0.00
100 SEED WEIGHT	0.47++	0.16	0.50++	0.28	0.00	0.12	0.00	0.19	0.00
QUALITY OF SEED	0.09	0.22	0.23	-0.16	0.00	0.05	0.00	0.28	0.00

(+ - PROE=-.05 \*\* - FSCB=-.01)

TABLE 54 EXPLANATION (44) YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	POTS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	35.75	15.60	25.25	3.00	41.4	19.3
6	DAVIS	1.00	50.75	6.25	23.25	1.25	40.0	21.7
4	IMPROVED PELICAN	1.00	50.25	4.12	21.00	1.75	--	--
5	BCSSIER	1.00	37.75	5.17	21.75	2.00	40.5	21.5
8	FORREST	1.00	48.25	4.92	17.00	2.50	39.5	21.1
11	CAITANI	1.00	44.75	4.12	20.00	3.00	40.4	21.1
2	HAMPTON 266A	1.00	41.00	4.25	27.50	2.50	42.1	20.7
5	COLUMBUS	1.00	44.00	4.25	19.50	2.25	38.1	21.1
3	HARDEE	1.00	21.00	7.90	23.00	2.00	40.5	21.6
10	WILLIAMS	1.00	37.25	3.45	19.50	1.25	40.6	21.5
12	SEMPES	1.00	44.75	3.40	19.50	2.00	42.0	20.3
7	TRACY	1.00	29.25	3.48	20.00	2.25	44.0	21.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	40.40	5.41	21.44	2.15		
COEFFICIENT OF VARIATION		0.00	2.42	0.42	0.67	0.36		
5% ISI VARIETY MEANS (*****=NS)		0.00	12.00%	15.53%	6.22%	23.96%		
		0.00	6.97	1.21	1.92	1.05		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD KG/HA		0.00	0.19	0.80**	0.47**	0.09		
DAYS TO FLOWR		0.00	-0.10	0.60**	0.16	0.22		
DAYS TO MATURITY		0.00	-0.05	0.64**	0.50**	0.23		
NCDULE NUMBER 1		0.00	0.15	0.29+	0.28	-0.16		
NCDULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NCDULE WEIGHT 1		0.00	0.04	0.33+	0.12	0.05		
NCDULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		0.00	-0.05	0.75**	0.19	0.28		
LODGING		0.00	0.00	0.00	0.00	0.00		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.29+	-0.20	-0.05		
POTS PER PLANT		0.00	-0.29+	1.00	0.45**	0.25		
100 SEED WEIGHT		0.00	-0.20	0.45**	1.00	0.02		
QUALITY OF SEED		0.00	-0.05	0.25	0.02	1.00		



TABLE 55 EXPERIMENT 645 YEAR 1975

REGION - AFRICA  
SITE - MCSSC  
LATITUDE - 4 DEG. S  
COFFEA - J. DE BRASANDIRE  
DATE PLANTED - FEBRUARY 14, 1976  
FERTILIZER USED (KG/HA) - N 42.0, P 84.0, K 42.0  
AMOUNT OF MOISTURE - 535 MM

COUNTRY - FUNDI  
ELEVATION - 1250 M  
LONGITUDE - 30 DEG. E  
DATE HARVESTED - MAY, 1976

N.B. - 3 REPLICATIONS ONLY FOR THIS EXPERIMENT

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICDGING
10	COLUMBUS	1803.67	0.00	86.00	0.00	0.00	0.00	0.00	36.67	1.00
3	HARDEE	1587.50	0.00	87.67	0.00	0.00	0.00	0.00	30.00	1.00
7	DAVIS	1586.83	0.00	92.33	0.00	0.00	0.00	0.00	31.33	1.00
1	JUPITER	1569.50	0.00	111.00	0.00	0.00	0.00	0.00	73.33	1.00
5	FORREST	1547.83	0.00	89.67	0.00	0.00	0.00	0.00	35.67	1.00
14	CAITANI	1245.83	0.00	83.00	0.00	0.00	0.00	0.00	38.00	1.00
6	BOSSIER	1101.50	0.00	78.33	0.00	0.00	0.00	0.00	23.67	1.00
15	SIMWLS	1086.17	0.00	82.00	0.00	0.00	0.00	0.00	20.67	1.00
2	HAMPTON 266A	1030.50	0.00	86.00	0.00	0.00	0.00	0.00	23.00	1.00
13	WILLIAMS	735.50	0.00	77.67	0.00	0.00	0.00	0.00	31.00	1.00
4	IMPROVED FELICAN	711.17	0.00	78.33	0.00	0.00	0.00	0.00	22.67	1.00
8	TRACY	568.00	0.00	75.00	0.00	0.00	0.00	0.00	23.33	1.00
12	WCCDCRTH	521.50	0.00	75.00	0.00	0.00	0.00	0.00	26.67	1.00
5	CCIE	276.83	0.00	82.67	0.00	0.00	0.00	0.00	22.67	1.00
11	CLARK 63	153.67	0.00	80.00	0.00	0.00	0.00	0.00	27.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROBE=.05      +- - FRCB=.01)										
YIELD	KG/HA	1.00	0.00	0.60++	0.00	0.00	0.00	0.00	0.48++	0.00
DAYS TO FLOWER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.60++	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.83++	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.48++	0.00	0.00	0.83++	0.00	0.00	0.00	0.00	1.00	0.00
ICDGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.64++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT WEIGHT	0.35+	0.00	0.00	0.78++	0.00	0.00	0.00	0.00	0.90++	0.00
100 SEED WEIGHT	0.36+	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.36+	0.00
QUALITY OF SEED	0.48++	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.10	0.00

TABLE 55 EXPERIMENT 645 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
10	CCUMBUS	1.00	477.33	28.10	19.00	1.00
3	HARDEF	1.00	476.67	26.70	19.00	2.67
7	DAVIS	1.00	619.00	24.37	18.67	2.00
1	JUETTER	1.00	481.33	63.00	19.67	1.00
5	FORREST	1.00	573.33	25.60	16.00	3.00
14	CALLAND	1.00	517.33	25.10	21.67	2.00
6	BOSSIER	1.00	522.67	20.77	17.33	1.00
15	SEMWES	1.00	593.00	17.17	19.00	1.00
2	HAMPTON 266A	1.00	534.00	20.13	20.00	1.00
13	WILLIAMS	1.00	474.00	24.43	18.00	1.00
4	IMPROVEL PELICAN	1.00	601.33	16.97	16.67	1.00
8	TRACY	1.00	510.00	24.43	16.00	1.00
12	WCOEWORTH	1.00	260.00	24.43	17.67	1.00
5	COEB	1.00	102.67	24.87	17.00	1.00
11	CLARK 63	1.00	53.67	21.83	18.00	1.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	453.09	25.84	18.24	1.38
COEFFICIENT OF VARIATION		0.00	22.18	2.78	0.50	0.09
5% ISI VARIETY MEANS (*****=NS)		0.00	8.48%	18.66%	4.76%	10.82%
		0.00	64.24	8.06	1.45	0.25
C C R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.64++	0.35+	0.36+	0.48++
DAYS TO FLOWER	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	0.16	0.78++	0.26	0.26
NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT	0.00	0.00	0.10	0.90++	0.36+	0.10
LCGING	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.00	0.00	1.00	-1.02	0.13	0.30+
PODS PER PLANT	0.00	0.00	-0.02	1.00	0.28	-0.02
100 SEED WEIGHT	0.00	0.00	0.13	1.28	0.00	0.00
QUALITY OF SEED	0.00	0.00	0.30+	-0.02	0.02	1.00

TABLE 56 EXPERIMENT 487 YEAR 1975

REGION - AFRICA COUNTRY - CAMEROON  
 SITE - WUM ELEVATION - 1000 M  
 LATITUDE - 10 DEG. N LONGITUDE - 6 DEG. E  
 COOPERATOR - W.A.L.A.  
 DATE PLANTED - SEPTEMBER 9, 1975 DATE HARVESTED - DECEMBER, 1975  
 SOIL TYPE - SILT  
 FERTILIZER USED (KG/HA) - N 26.0, P 12.0, K 36.0  
 AMOUNT OF MOISTURE - 1168 MM  
 NUMBER OF IRRIGATIONS - 30

PNTFY NUMBER	VARIETY OR CROSS	YFLD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE W/FIGHT 1	NODULE W/FIGHT 2	PLANT HEIGHT	LCDGNG
9	PORRST	921.95	50.00	110.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	1.00
4	IMPROVED PELICAN	838.61	50.00	115.00	0.00	0.00	0.00	0.00	0.00	0.00	31.25	1.00
3	HARDEF	765.69	50.00	115.00	0.00	0.00	0.00	0.00	0.00	0.00	23.00	1.00
7	DAVIS	734.43	50.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	22.75	1.00
2	HAMPTON 266A	713.60	41.00	95.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	1.00
10	COLUMBUS	633.38	41.00	95.00	0.00	0.00	0.00	0.00	0.00	0.00	20.75	1.00
13	WILLIAMS	630.26	41.00	95.00	0.00	0.00	0.00	0.00	0.00	0.00	17.50	1.00
6	BOSSIER	609.42	41.00	95.00	0.00	0.00	0.00	0.00	0.00	0.00	17.50	1.00
15	SEMME	602.13	41.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	19.00	1.00
1	JUPITER	520.87	47.75	100.00	0.00	0.00	0.00	0.00	0.00	0.00	37.50	1.00
14	CALLAND	458.37	41.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	19.00	1.00
8	TRACY	458.37	41.00	95.00	0.00	0.00	0.00	0.00	0.00	0.00	19.00	1.00
5	COBB	437.53	41.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	20.50	1.00
11	CLARK 63	435.45	41.00	95.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	1.00
12	WOODWORTH	380.24	41.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	17.50	1.00
GRAND MEAN		609.35	43.85	102.00	0.00	0.00	0.00	0.00	0.00	0.00	22.18	1.00
STANDARD ERROR OF A VARIETY MEAN		44.86	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	0.00
COEFFICIENT OF VARIATION		14.73%	2.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23.20%	0.00%
5% LSD VARIETY MEANS (*****=NS)		128.05	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.34	0.00
C O R R E L A T I O N S												
(+ - PROB=.05      +- - PROB=.01)												
YFLD	KG/HA	1.00	0.63++	0.56++	0.00	0.00	0.00	0.00	0.00	0.00	0.30+	0.00
DAYS TO FLOWER		0.63++	1.00	0.87++	0.00	0.00	0.00	0.00	0.00	0.00	0.69++	0.00
DAYS TO MATURITY		0.56++	0.87++	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.30+	0.69++	0.37++	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATIER		-0.65++	-0.48++	-0.34++	0.00	0.00	0.00	0.00	0.00	0.00	-0.36++	0.00
HARVEST		0.28+	0.14	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
POTS PPR PLANT		0.31+	0.63++	0.35++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED W/FIGHT		-0.01	-0.14	-0.34++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		-0.36++	-0.34++	-0.12	0.00	0.00	0.00	0.00	0.00	0.00	-0.33++	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 56 EXPERIMENT 487 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.00	43.75	13.00	20.00	1.00	41.6	22.9
4	IMPROVED PELICAN	1.00	46.75	15.25	16.25	2.00	45.1	21.6
3	HARDEE	1.00	41.25	10.75	16.25	3.00	43.1	22.3
7	DAVIS	1.00	45.25	8.75	17.50	2.00	40.8	23.2
2	HAMPTON 266A	1.00	48.50	7.75	18.75	3.00	40.7	23.0
10	COLUMBUS	1.00	41.75	7.75	22.50	2.00	20.4	45.3
13	WILLIAMS	2.00	44.25	5.75	27.50	1.25	43.1	21.3
6	BOSSIER	1.00	41.00	7.00	18.75	2.00	44.7	21.4
15	SPYNNES	1.00	51.75	8.50	16.25	3.00	41.6	22.1
1	JUPITER	1.00	50.00	18.75	20.00	2.00	41.8	22.0
14	CALLAND	3.00	43.75	6.00	16.25	4.00	44.1	21.4
8	TRACY	3.00	34.75	9.00	21.25	2.00	43.9	19.9
5	COBB	2.00	42.75	9.25	16.25	3.00	42.0	21.9
11	CLARK 63	2.00	31.25	5.75	20.00	3.00	42.2	23.2
12	WOODWORTH	4.00	38.25	7.50	17.50	2.00	43.1	21.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.67	43.00	9.38	19.00	2.35		
COEFFICIENT OF VARIATION		0.00	4.37	1.63	1.68	0.15		
5% LSD VARIETY MEANS (*****=NS)		0.00	20.34	34.76	17.73	14.03		
		0.00	*****	4.65	4.81	0.47		
C O R R E L A T I O N S								
				(+ - PROB=.05		+ - PROB=.01)		
YIELD	KG/HA	-0.65++	0.28+	0.31+	-0.00	-0.36++	0.00	0.00
DAYS TO FLOWER		-0.43++	0.14	0.63++	-0.14	-0.34++	0.00	0.00
DAYS TO MATURITY		-0.34++	0.11	0.35++	-0.34++	-0.12	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		-0.36++	0.00	0.78++	0.01	-0.33++	0.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	-0.23	-0.32+	0.02	0.15	0.00	0.00
PODS PER PLANT		-0.23	1.00	0.12	0.01	-0.01	0.00	0.00
100 SEED WEIGHT		-0.32+	0.12	1.00	0.01	-0.32+	0.00	0.00
QUALITY OF SEED		0.02	0.01	0.01	1.00	-0.51++	0.00	0.00
DISEASE I		0.15	-0.01	-0.32+	-0.51++	1.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00





TABLE 57 EXPERIMENT 490 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	179.00	16.55	18.50	1.00	41.2	23.6
9	FORREST	1.00	193.75	10.95	17.25	2.00	41.8	23.0
7	DAVIS	1.00	176.00	10.30	17.00	1.00	43.6	22.6
3	HARDEF	1.00	155.00	12.73	16.75	1.00	39.9	25.3
5	CORR	1.00	166.50	10.00	18.25	3.00	39.8	24.9
2	HAMPTON 266A	1.00	207.75	7.70	21.50	1.00	45.4	21.5
6	BOSSIER	1.00	156.25	8.67	18.00	1.00	46.1	21.2
15	SENNES	1.00	185.50	6.03	18.25	2.00	45.7	20.6
4	IMPROVED PELICAN	1.00	203.75	10.30	11.50	2.00	42.1	24.0
10	COLUMBUS	1.00	154.75	6.22	18.00	1.00	44.7	22.1
14	CALLAND	1.00	136.00	6.65	19.25	1.00	44.8	20.6
8	TRACY	1.00	163.00	6.08	16.75	1.00	46.6	19.1
13	WILLIAMS	1.00	119.75	5.62	18.50	1.00	45.5	22.1
12	WOODWORTH	1.00	98.25	6.10	17.00	1.00	43.0	22.3
11	CLARK 63	1.00	59.25	7.35	18.50	1.00	43.6	22.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	156.97	8.75	17.67	1.33		
COEFFICIENT OF VARIATION		0.00	11.27	1.60	0.93	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	14.36%	36.49%	10.52%	0.00%		
		0.00	32.21	4.56	2.65	0.00		
C O R R E L A T I O N S								
			(+ - PROB=.05			+ - - PROB=-.01)		
YIELD	KG/HA	0.00	0.55++	0.84++	0.26+	0.17	0.00	0.00
DAYS TO FLOWER		0.00	0.32+	0.61++	-0.02	0.09	0.00	0.00
DAYS TO MATURITY		0.00	0.34++	0.66++	-0.05	0.23	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.39++	0.43++	0.33++	0.04	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.27+	0.72++	-0.04	0.01	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.33++	0.01	0.34++	0.00	0.00
PLANTS PER PLANT		0.00	0.33++	1.00	0.06	0.10	0.00	0.00
100 SEED WEIGHT		0.00	0.01	0.06	1.00	-0.21	0.00	0.00
QUALITY OF SEED		0.00	0.34++	0.10	-0.21	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 58 EXPERIMENT 435

YEAR 1975

REGION - AFRICA  
 SITE - INA, PARAKOU  
 LATITUDE - 9 DEG. 58 MIN. N  
 COOPERATOR - I.R.A.T.-DAHOMY  
 DATE PLANTED - JULY 9, 1975  
 SOIL TYPE - SAND, PH 5.2  
 FERTILIZER USED (KG/HA) - P 40.0, K 60.0  
 AMOUNT OF MOISTURE - 788 MM

COUNTRY - DAHOMY  
 ELEVATION - 358 M  
 LONGITUDE - 2 DEG. 44 MIN. E

DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	LOGGING
1	JUPITER	3175.63	47.50	108.25	202.50	290.00	1.22	3.27	77.75	1.50
3	HARDEE	3125.62	40.75	103.75	185.00	453.50	1.21	4.33	39.00	1.00
7	DAVIS	2833.90	39.00	100.75	183.50	333.00	1.07	3.21	34.75	1.00
4	IMPROVED PELICAN	2729.71	44.50	104.00	196.25	346.75	1.05	2.79	74.25	1.00
5	COBB	2600.52	40.25	102.25	178.25	341.00	1.60	5.14	36.25	1.00
9	FORREST	2433.82	37.25	94.25	158.75	331.25	1.13	4.42	35.25	1.00
14	CALLIAND	2400.48	36.75	89.50	207.50	333.50	1.45	4.11	48.50	1.00
10	COLUMBUS	2400.48	37.25	92.25	257.00	390.25	1.45	4.28	46.50	1.00
15	SEMMES	2333.80	37.00	92.50	205.50	409.25	1.05	3.75	25.75	1.00
2	HAMPTON 266A	2225.44	36.75	96.50	226.00	432.00	1.39	3.96	37.25	1.00
6	BOSSIER	2108.75	38.00	97.50	255.75	385.25	1.60	4.47	26.25	1.00
13	WILLIAMS	1867.04	35.25	86.00	217.00	288.75	1.42	3.59	31.50	1.00
8	TRACY	1850.37	35.25	82.00	178.50	225.75	1.32	3.21	28.00	1.00
11	CLARK 63	1700.34	36.50	88.00	200.25	277.75	1.22	3.31	35.75	1.00
12	WOODWORTH	1233.58	33.50	78.50	169.75	180.50	0.99	2.40	32.50	1.00
GRAND MEAN										
2334.63										
STANDARD ERROR OF A VARIETY MEAN										
212.23										
COEFFICIENT OF VARIATION										
18.18%										
5% LSD VARIETY MEANS (*****=NS)										
606.59										
CORRELATIONS										
(+ - PROB=.05    +- - PROB=.01)										
YIELD KG/HA										
1.00										
DAYS TO MATURITY										
0.67**										
0.77**										
0.88**										
NODULE NUMBER 1										
0.77**										
0.88**										
NODULE NUMBER 2										
0.36**										
0.43**										
NODULE WEIGHT 1										
0.32*										
0.46**										
NODULE WEIGHT 2										
0.31*										
0.47**										
PLANT										
0.54**										
0.75**										
LODGING										
0.18										
SHATTER										
0.00										
PLANTS										
0.24										
PODS PER										
100 SEED										
0.70**										
WEIGHT										
0.45**										
QUALITY										
OF SEED										
0.15										
DISEASE										
I										
0.00										
DISEASE										
II										
0.00										
DISEASE										
III										
0.00										

TABLE 58 EXPERIMENT 435 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	0.00	145.00	43.75	21.25	2.00	43.7	21.7
3	HARDEE	0.00	103.00	45.75	20.75	2.75	45.6	23.7
7	DAVIS	0.00	161.25	23.75	20.00	2.00	43.5	23.6
4	IMPROVED PELICAN	0.00	155.75	44.00	15.00	1.00	44.5	24.0
5	COBB	0.00	133.50	35.50	20.50	2.25	40.8	24.8
9	FORREST	0.00	166.75	24.75	16.75	2.00	43.2	23.1
14	CALLAND	0.00	157.50	20.00	20.25	3.00	44.1	23.2
10	COLUMBUS	0.00	151.00	24.25	19.00	2.25	44.1	24.6
15	SEMMES	0.00	147.25	23.50	19.00	2.00	44.6	21.4
2	HAMPTON 266A	0.00	147.50	25.25	21.00	2.50	42.1	26.0
6	BOSSIER	0.00	154.75	26.75	19.00	2.00	46.7	21.8
13	WILLIAMS	0.00	148.25	17.25	20.00	2.25	43.2	24.9
8	TRACY	0.00	152.00	17.25	19.25	2.25	46.2	21.8
11	CLARK 63	0.00	144.50	17.50	18.50	3.75	43.4	23.4
12	WOODBORTH	0.00	151.00	14.00	17.00	2.50	42.0	24.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	147.93	26.88	19.15	2.30		
COEFFICIENT OF VARIATION		0.00%	7.19	2.41	0.53	0.25		
5% LSD VARIETY MEANS (*****=NS)		0.00	20.54	17.94%	5.55%	21.81%		
				6.89	1.52	0.72		
C O R R E L A T I O N S								
			(+ - PROB=.05			+ - PROP=.01)		
YIELD	KG/HA	0.00	-0.24	0.70**	0.45**	-0.15	0.00	0.00
DAYS TO	FLOWER	0.00	-0.19	0.82**	0.11	-0.33**	0.00	0.00
DAYS TO	MATURITY	0.00	-0.26+	0.84**	0.25	-0.31+	0.00	0.00
NODULE	NUMBER 1	0.00	-0.18	0.17	0.36**	0.10	0.00	0.00
NODULE	NUMBER 2	0.00	-0.46**	0.41**	0.24	-0.03	0.00	0.00
NODULE	WEIGHT 1	0.00	-0.29+	0.18	0.45**	0.16	0.00	0.00
NODULE	WEIGHT 2	0.00	-0.52**	0.26+	0.34**	0.09	0.00	0.00
PLANT	HEIGHT	0.00	-0.04	0.62**	0.02	-0.18	0.00	0.00
	LODGING	0.00	0.00	0.16	0.19	-0.05	0.00	0.00
	SHATTER	1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.46**	-0.32+	-0.11	0.00	0.00
PODS PER	PLANT	0.00	-0.46**	1.00	0.16	-0.29+	0.00	0.00
100 SEED	WEIGHT	0.00	-0.32+	0.16	1.00	0.32+	0.00	0.00
QUALITY	OF SEED	0.00	-0.11	-0.29+	0.32+	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00								



TABLE 59 EXPERIMENT 431 YEAR 1975

REGION - AFRICA  
 SITE - BAHTEEM  
 LATITUDE - 30 DEG. N  
 COOPERATOR - ALI ABDEL AZIZ  
 DATE PLANTED - JUNE 6, 1975  
 SOIL TYPE - CLAY LOAM, PH 8.0  
 FERTILIZER USED (KG/HA) - N 11.4, P 4.5  
 NUMBER OF IRRIGATIONS - 5 (EARLY VARIETIES) 7 (LATE VARIETIES)  
 SUBSTITUTE VARIETIES - CLARK, HAMPTON

COUNTRY - EGYPT

LONGITUDE - 31 DEG. 15 MIN. E

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	PLANT LODGING
7	FORREST	3098.54	52.75	124.00	0.00	0.00	0.00	0.00	0.00	1.00
12	CLARK	2703.46	32.75	88.25	0.00	0.00	0.00	0.00	0.00	1.00
8	COLUMBUS	2581.77	32.50	91.25	0.00	0.00	0.00	0.00	0.00	1.00
10	WOODWORTH	2575.51	31.00	84.25	0.00	0.00	0.00	0.00	0.00	1.00
11	WILLIAMS	2542.17	30.25	83.50	0.00	0.00	0.00	0.00	0.00	1.00
3	HODGSON	2244.20	28.00	77.25	0.00	0.00	0.00	0.00	0.00	1.00
6	WELLS	2186.69	31.25	82.75	0.00	0.00	0.00	0.00	0.00	1.00
13	HAMPTON	1985.81	67.25	163.75	0.00	0.00	0.00	0.00	0.00	1.00
5	BEESON	1812.86	30.25	80.00	0.00	0.00	0.00	0.00	0.00	1.75
9	CLARK 63	1744.10	31.00	91.00	0.00	0.00	0.00	0.00	0.00	1.00
4	AMSOY 71	1722.43	30.25	82.25	0.00	0.00	0.00	0.00	0.00	1.00
2	SWIFT	1331.52	27.75	70.50	0.00	0.00	0.00	0.00	0.00	1.00
1	ALTONA	1312.76	27.75	71.50	0.00	0.00	0.00	0.00	0.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2141.68	34.83	91.56	0.00	0.00	0.00	0.00	0.00	1.06
COEFFICIENT OF VARIATION		376.41	0.54	0.60	0.00	0.00	0.00	0.00	0.00	0.07
5% LSD VARIETY MEANS (*****=NS)		1081.16	1.55	1.32%	0.00%	0.00%	0.00%	0.00%	0.00%	13.11%
C O R R E L A T I O N S										
(+ - PROB=-.05      +- - PROB=-.01)										
YIELD	KG/HA	1.00	0.18	0.19	0.00	0.00	0.00	0.00	0.00	-0.07
DAYS TO FLOWER	0.18	1.00	0.98++	0.98++	0.00	0.00	0.00	0.00	0.00	0.73++
DAYS TO MATURITY	0.19	0.98++	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.74++
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LODGING	0.00	-0.07	0.73++	0.74++	0.00	0.00	0.00	0.00	1.00	0.00
SHATTER	-0.29+	-0.18	-0.18	-0.24	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS	HARVEST	0.39++	-0.20	-0.29+	0.00	0.00	0.00	0.00	0.00	-0.07
PODS PER PLANT	0.32+	0.32+	0.78++	0.78++	0.00	0.00	0.00	0.00	0.00	-0.26
100 SEED WEIGHT	0.02	0.10	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.58++
QUALITY OF SEED	-0.09	0.07	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.34+
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.17
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 60 EXPERIMENT 434 YEAR 1975

REGION - AFRICA  
 SITE - SEDS  
 LATITUDE - 25 DEG. N  
 COOPERATOR - ALI ABDEL AZIZ  
 DATE PLANTED - JULY 5, 1975  
 SOIL TYPE - CLAY LOAM, PH 8.0  
 FERTILIZER USED (KG/HA) - N 11.4, P 4.5  
 NUMBER OF IRRIGATIONS - 4  
 SUBSTITUTE VARIETIES - CLARK, HAMPTON

COUNTRY - EGYPT  
 LONGITUDE - 31 DEG. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	PLANT HEIGHT
9	COLUMBUS	2921.42	40.25	86.50	2.75	7.75	0.02	0.07	50.00	1.50
8	FORREST	2704.71	46.00	89.50	2.00	2.00	0.05	0.01	63.75	1.75
6	DAVIS	2588.02	50.00	97.00	16.00	23.75	0.13	0.03	71.25	1.75
7	TRACY	2529.67	49.25	96.25	3.50	1.50	0.05	0.03	57.50	1.25
5	BOSSIER	2517.17	51.00	103.75	5.25	22.00	0.05	0.19	67.50	2.50
2	HARDEE	2325.46	59.25	113.25	10.00	41.50	0.19	0.94	87.50	3.25
4	COBB	2258.78	57.00	109.25	1.00	5.00	0.06	0.13	68.75	2.75
14	HAMPTON	2254.62	58.00	109.00	11.00	5.50	0.21	0.13	62.50	2.50
11	WOODWORTH	2175.43	35.00	75.00	0.00	6.00	0.00	0.05	53.75	1.00
13	CLARK	2142.09	38.75	78.75	1.75	5.50	0.03	0.05	53.75	1.25
12	WILLIAMS	1979.56	36.25	75.00	0.00	2.50	0.00	0.04	48.75	1.25
1	HAMPTON 266A	1892.04	55.00	110.75	6.50	9.00	0.05	0.03	58.75	3.25
3	IMPROVED PELICAN	1825.36	63.25	108.00	0.50	0.00	0.01	0.00	103.75	3.50
10	CLARK 63	1775.35	38.50	78.75	1.25	2.50	0.01	0.03	45.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R E L A T I O N S										
(+ - PROB=.05    +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.16	-0.02	0.12	0.05	-0.01	-0.17	0.29+	0.01
DAYS TO FLOWER	1.00	0.93++	1.00	0.32+	0.32+	0.15	0.34++	0.17	0.53++	0.62++
DAYS TO MATURITY	-0.02	0.93++	1.00	0.32+	0.32+	0.22	0.33+	0.19	0.53++	0.63++
NODULE NUMBER 1	0.12	0.32+	0.32+	1.00	0.52++	0.52++	0.75++	0.23	0.23	0.13
NODULE NUMBER 2	0.05	0.16	0.22	0.52++	1.00	1.00	0.61++	0.80++	0.31+	0.19
NODULE WEIGHT 1	-0.01	0.34++	0.33+	0.75++	0.61++	0.61++	1.00	0.58++	0.21	0.12
NODULE WEIGHT 2	-0.17	0.17	0.19	0.23	0.80++	0.80++	0.58++	1.00	0.21	0.26
PLANT HEIGHT	0.29+	0.53++	0.53++	0.23	0.31+	0.31+	0.21	0.21	1.00	0.70++
LODGING	0.01	0.62++	0.69++	0.13	0.19	0.19	0.12	0.26	0.70++	1.00
SHATTER	-0.12	0.18	0.21	-0.06	-0.01	-0.01	0.09	0.05	-0.09	-0.01
PODS PER PLANT	0.30+	-0.27+	-0.26	0.27+	0.26	0.26	0.10	0.10	0.22	-0.11
100 SEED WEIGHT	0.28+	0.50++	0.56++	0.15	0.14	0.14	0.16	0.13	0.57++	0.52++
QUALITY OF SEED	0.17	-0.38++	-0.27+	0.17	0.05	0.05	-0.01	-0.14	-0.25	-0.20
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 60 EXPERIMENT 434 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	COLUMBUS	1.00	201.00	25.83	19.92	0.00	41.5	23.2
8	FORREST	1.00	253.25	32.08	17.97	0.00	39.8	23.0
6	DAVIS	1.00	266.50	35.13	21.50	0.00	45.4	18.2
7	TRACY	1.00	180.50	26.65	12.74	0.00	40.5	22.4
5	BOSSIER	1.00	185.00	23.83	15.42	0.00	42.5	22.5
2	HARDEF	1.00	220.50	40.93	13.46	0.00	38.5	22.9
4	COBB	1.50	157.75	42.65	13.91	0.00	38.7	23.0
14	HAMPTON	1.00	248.75	34.25	14.04	0.00	39.0	22.7
11	WOODWORTH	1.00	228.75	25.93	16.20	0.00	41.0	24.3
13	CLARK	1.00	235.25	26.85	14.06	0.00	41.7	24.5
12	WILLIAMS	1.00	270.75	18.35	17.35	0.00	42.9	23.4
1	HAMPTON 266A	1.00	220.25	33.28	19.29	0.00	36.4	24.0
3	IMPROVED PELICAN	1.00	177.25	36.33	11.99	0.00	42.4	22.0
10	CLARK 63	1.00	201.00	20.00	16.20	0.00	40.5	23.0
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.04	217.61	30.16	16.00	0.00		
COEFFICIENT OF VARIATION		0.08	22.97	4.05	0.12	0.00		
5% LSD VARIETY MEANS (*****=NS)		14.90%	21.11%	26.85%	1.51%	0.00%		
		0.22	65.64	11.57	0.35	0.00		
C C R R E L A T I O N S								
				(+ - PROB=.05		+ + - PROB=.01)		
YIELD	KG/HA	-0.12	0.30+	0.28+	0.17	0.00	0.00	0.00
DAYS TO	PLCWR	0.18	-0.27+	0.50++	-0.38++	0.00	0.00	0.00
DAYS TO	MATURITY	0.21	-0.26	0.56++	-0.27+	0.00	0.00	0.00
NODULE	NUMBER 1	-0.06	0.25	0.15	0.17	0.00	0.00	0.00
NODULE	NUMBER 2	-0.01	0.27+	0.14	0.05	0.00	0.00	0.00
NODULE	WEIGHT 1	0.09	0.24	0.16	-0.01	0.00	0.00	0.00
NODULE	WEIGHT 2	0.05	0.10	0.13	-0.14	0.00	0.00	0.00
PLANT	HEIGHT	-0.09	0.22	0.57++	-0.25	0.00	0.00	0.00
	LODGING	-0.01	-0.11	0.52++	-0.20	0.00	0.00	0.00
	SHATTER	1.00	-0.23	0.28+	-0.15	0.00	0.00	0.00
PLANTS	HARVEST	-0.23	1.00	-0.02	0.29+	0.00	0.00	0.00
PODS PER	PLANT	0.28+	-0.02	1.00	-0.14	0.00	0.00	0.00
100 SEED	WEIGHT	-0.15	0.29+	-0.14	1.00	0.00	0.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 61 EXPERIMENT 403 YEAR 1975

REGION - AFRICA  
 SITE - AUSSIE NEGELLIE  
 LATITUDE - 7 DEG. N  
 COOPERATORS - ENEVEN BTS, DEMISSIE MITIKU, PEKADU ABEBE  
 DATE PLANTED - JUNE 18, 1975  
 SOIL TYPE - CLAY LOAM  
 FERTILIZER USED (KG/HA) - N 18.0, P 46.0  
 SUBSTITUTION VARIETY - HILL

COUNTRY - ETHIOPIA  
 ELEVATION - 1960 M  
 LONGITUDE - 38 DEG. E  
 DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
12	WILLIAMS	1129.39	60.75	142.25	203.00	316.50	3.70	4.08	63.00	0.00
8	FORREST	1000.20	75.25	153.75	116.25	213.00	1.83	3.23	75.50	0.00
5	AMSOY 71	800.16	60.75	139.75	156.25	168.50	1.90	2.20	50.75	0.00
6	BEFSON	516.77	64.25	161.75	141.00	142.50	2.53	1.80	55.50	0.00
3	HARK	458.42	57.25	140.25	138.50	154.50	1.53	2.38	54.00	0.00
10	CLARK 63	383.41	60.75	140.50	195.50	246.50	3.18	4.25	64.25	0.00
1	ALTONA	379.24	58.25	137.50	166.00	200.50	2.08	2.28	48.25	0.00
11	WOODWORTH	325.06	58.25	140.25	169.00	182.50	2.03	2.15	61.00	0.00
4	COLUMBUS	295.89	62.75	147.25	179.00	307.50	3.43	5.37	71.00	0.00
13	HILL	233.38	65.50	143.25	90.50	142.00	2.95	3.58	68.25	0.00
7	WELLS	195.87	58.50	139.25	159.75	200.50	2.50	2.88	51.00	0.00
4	HODGSON	87.52	62.25	157.75	95.50	103.75	1.60	1.08	45.00	0.00
2	SWIFT	62.51	58.25	139.50	124.75	136.00	1.23	1.33	44.00	0.00
14	BONDS	37.51	60.50	159.00	143.00	209.00	3.30	3.80	66.75	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.41++	-0.07	0.22	0.35++	0.13	0.20	0.30+	0.00
DAYS TO FLOWER	1.00	0.41++	1.00	0.50++	-0.21	0.04	0.04	0.19	0.59++	0.00
DAYS TO MATURITY	-0.07	0.50++	1.00	1.00	-0.23	-0.14	0.09	-0.05	0.23	0.00
NODULE NUMBER 1	0.22	-0.21	-0.21	-0.23	1.00	0.55++	0.69++	0.33+	0.07	0.00
NODULE NUMBER 2	0.35++	0.04	-0.14	0.55++	0.55++	1.00	0.58++	0.81++	0.42++	0.00
NODULE WEIGHT 1	0.13	0.04	0.04	0.09	0.69++	0.53++	1.00	0.64++	0.40++	0.00
NODULE WEIGHT 2	0.20	0.18	0.18	-0.05	0.33+	0.81++	0.64++	1.00	0.65++	0.00
PLANT	0.30+	0.59++	0.59++	0.23	0.07	0.42++	0.40++	0.65++	1.00	0.00
LOGGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	0.01	-0.02	-0.02	0.09	0.17	0.06	0.10	0.02	0.01	0.00
HARVEST	0.76++	0.46++	0.46++	-0.11	0.24	0.32+	0.32+	0.32+	0.46++	0.00
PODS PER PLANT	0.39++	0.07	0.07	0.09	0.02	-0.14	-0.22	-0.43++	-0.42++	0.00
100 SEED WEIGHT	-0.32+	-0.18	-0.18	0.11	-0.06	0.01	0.25	0.17	0.07	0.00
QUALITY OF SEED	-0.46++	-0.37++	-0.37++	-0.15	-0.12	-0.39++	-0.41++	-0.56++	-0.62++	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 61

EXPERIMENT 403

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
12	WILLIAMS	0.00	185.75	14.00	18.80	4.50	45.3	15.3
8	FORREST	0.00	190.00	15.03	16.48	2.50	42.9	16.5
5	AMSOY 71	0.00	181.25	11.28	16.48	3.50	44.2	18.1
6	BEESON	0.00	192.25	9.73	19.65	4.25	44.6	16.8
3	HARK	0.00	194.00	7.88	15.45	3.50	46.6	16.3
10	CLARK 63	0.00	177.00	10.18	13.25	3.25	46.4	17.8
1	ALTONA	0.00	178.75	6.40	18.85	2.75	47.9	14.1
11	WOODWORTH	0.00	194.00	7.43	14.88	3.25	45.6	18.3
9	COLUMBUS	0.00	193.25	7.10	14.48	4.75	46.9	17.4
13	HILL	0.00	167.75	10.70	13.93	5.00	46.0	18.1
7	WELLS	0.00	197.00	8.12	13.90	4.25	45.9	18.1
4	HODGSON	0.00	182.50	2.50	18.00	3.75	43.2	18.4
2	SWIFT	0.00	179.50	1.40	17.30	5.00	44.4	17.1
14	BONUS	0.00	190.75	3.25	11.55	4.75	49.2	18.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	185.98	8.21	15.93	3.93		
COEFFICIENT OF VARIATION		0.00	7.87	1.43	0.34	0.23		
5% LSD VARIETY MEANS (*****=NS)		0.00%	8.47%	34.84%	4.23%	11.63%		
		0.00	*****	4.09	0.96	0.65		
C O R R E L A T I O N S								
(+ - PROB=-.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.01	0.76++	0.39++	-0.32+	-0.46++	0.00
DAYS TO	FLOWER	0.00	-0.02	0.46++	0.07	-0.18	-0.37++	0.00
DAYS TO	MATURITY	0.00	0.09	-0.11	0.09	0.11	-0.15	0.00
NODULE	NUMBER 1	0.00	0.17	0.24	0.02	-0.06	-0.12	0.00
NODULE	NUMBER 2	0.00	0.06	0.32+	-0.14	0.01	-0.39++	0.00
NODULE	WEIGHT 1	0.00	0.10	0.27+	-0.22	0.25	-0.41++	0.00
NODULE	WEIGHT 2	0.00	0.02	0.32+	-0.43++	0.17	-0.56++	0.00
PLANT	HEIGHT	0.00	0.01	0.46++	-0.42++	0.02	-0.62++	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	-0.10	-0.10	-0.12	-0.10	-0.10	0.00
100 SEED	WEIGHT	0.00	-0.12	1.00	0.12	-0.25	-0.62++	0.00
QUALITY	OF SEED	0.00	-0.10	0.12	1.00	-0.16	0.29+	0.00
DISEASE	I	0.00	-0.10	-0.25	-0.16	1.00	-0.06	0.00
DISEASE	II	0.00	0.00	-0.62++	0.29+	-0.06	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 62 EXPERIMENT 405 YEAR 1975

REGION - AFRICA COUNTRY - ETHIOPIA  
 SITE - BAKO ELEVATION - 1650 M  
 LATITUDE - 7 DEG. N LONGITUDE - 37 DEG. E  
 COOPERATORS - A. ABDURAHMAN, H. TEKLEMARIAM  
 DATE PLANTED - JUNE 19, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - SAND 38%, SILT 20%, CLAY 42%, PH 5.7  
 FERTILIZER USED (KG/HA) - N 23.0, P 65.0  
 AMOUNT CP MOISTURE - 1080 MM

ENTRY NUMBR	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	1393.20	53.00	136.00	167.50	202.00	2.18	3.60	57.75	1.00
11	CLARK 63	1125.22	51.50	123.00	259.75	228.75	2.88	4.37	43.75	1.00
12	WOODWORTH	1053.54	49.50	121.50	186.25	170.50	2.18	3.30	37.25	1.50
5	AMSOY 71	956.86	50.00	126.25	199.25	229.75	2.38	2.90	37.50	1.00
7	BRESON	950.19	49.75	123.00	190.50	181.50	3.13	4.87	40.75	1.00
10	COLUMBUS	909.35	54.25	136.00	282.00	340.00	3.70	6.90	60.25	1.00
3	HARK	857.67	49.25	123.00	197.25	201.00	2.60	3.85	34.25	1.00
13	WILLIAMS	766.82	49.50	123.25	241.75	289.50	3.08	5.23	42.25	1.50
8	WELLS	760.15	49.25	123.00	204.50	184.75	3.05	5.73	28.50	1.00
1	ALTONA	675.13	48.75	108.75	155.25	177.00	2.03	2.68	33.50	1.75
14	CALLAND	593.45	50.25	132.75	180.75	204.25	3.40	4.78	46.50	1.00
4	HODGSON	418.42	49.00	123.00	205.75	165.00	2.18	2.40	31.25	1.00
15	BONUS	268.39	50.50	132.75	184.75	254.00	3.08	4.43	40.50	1.00
6	COPSOY	229.21	51.00	116.75	184.50	224.25	2.60	2.53	26.50	1.00
2	SWIFT	215.88	47.75	108.75	199.50	162.25	2.58	1.90	28.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.28+	0.23	0.10	0.02	-0.04	0.14	0.41++	0.07
DAYS TO FLOWER	1.00	0.28+	1.00	0.31+	0.03	0.16	0.05	0.11	0.48++	-0.10
DAYS TO MATURITY	0.23	0.31+	1.00	0.26+	0.03	0.45++	0.33++	0.45++	0.67++	-0.33+
MODULE NUMBER 1	0.10	0.10	0.03	1.00	0.26+	0.52++	0.60++	0.44++	0.37++	-0.17
MODULE NUMBER 2	0.02	0.02	0.16	0.45++	0.52++	1.00	0.46++	0.65++	0.46++	-0.09
MODULE WEIGHT 1	-0.04	0.05	0.33++	0.45++	0.60++	0.46++	1.00	0.57++	0.31+	-0.31+
MODULE WEIGHT 2	0.14	0.11	0.45++	0.44++	0.44++	0.65++	0.57++	1.00	0.48++	-0.19
PLANT HEIGHT	0.41++	0.48++	0.48++	0.67++	0.37++	0.46++	0.31+	0.48++	1.00	-0.12
LODGING	0.07	-0.10	-0.33+	-0.33+	-0.17	-0.00	-0.31+	-0.19	-0.12	1.00
SHATTER	0.04	0.05	0.05	0.18	0.13	0.05	0.17	-0.01	0.02	-0.08
PLANTS	0.26+	0.09	-0.09	-0.14	0.03	0.15	-0.08	0.20	0.23	0.23
PODS PER PLANT	0.66++	0.16	0.16	0.16	0.13	0.10	-0.03	0.19	0.37++	0.37++
100 SEED WEIGHT	0.02	0.15	-0.15	-0.14	-0.20	-0.30+	-0.03	-0.17	-0.09	-0.05
QUALITY OF SEED	0.02	-0.15	0.12	0.12	-0.12	-0.20	-0.07	-0.08	0.08	0.02
DISEASE I	-0.36++	-0.13	-0.46++	-0.10	-0.10	-0.27+	-0.07+	-0.38++	-0.48++	0.02
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 62 EXPERIMENT 405 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.00	196.75	10.00	19.38	3.00	40.3	17.0
11	CLARK 63	1.00	209.00	9.50	16.65	2.25	45.8	16.9
12	WOODWORTH	1.00	201.25	10.75	16.35	2.25	45.7	16.4
5	AMSOY 71	1.25	196.25	8.25	20.20	3.50	44.5	17.3
7	BEESON	1.00	195.50	8.25	21.65	2.75	45.5	16.4
10	COLUMBUS	1.00	193.00	8.00	16.77	2.00	46.2	16.0
3	HARK	1.00	187.00	8.25	18.48	2.50	47.1	15.4
13	WILLIAMS	1.25	204.50	12.25	20.63	2.25	43.7	16.4
8	WELLS	1.00	201.00	7.00	18.03	2.50	46.2	16.0
1	ALTONA	1.00	201.50	8.00	19.75	3.25	46.6	17.0
14	CALLAND	1.00	196.50	6.00	20.85	3.50	46.0	16.6
4	HODGSON	1.00	189.25	5.75	20.60	3.00	45.1	16.8
15	BONUS	1.25	194.00	4.50	16.43	3.25	49.3	15.7
6	CORSOY	1.00	196.25	3.25	19.23	0.00	--	--
2	SWIFT	1.00	196.00	3.25	18.43	3.75	46.0	16.0
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	-0.04	0.26+	0.66++	0.02	0.02	-0.36++	0.00
DAYS TO FLOWER		0.05	-0.09	0.16	-0.15	-0.15	-0.13	0.00
DAYS TO MATURITY		0.18	-0.14	0.16	-0.14	0.12	-0.46++	0.00
NODULE NUMBER 1		0.13	0.03	0.13	-0.20	-0.11	-0.10	0.00
NODULE NUMBER 2		0.05	0.15	0.10	-0.30+	-0.20	-0.27+	0.00
NODULE WEIGHT 1		0.17	-0.08	-0.03	-0.03	-0.07	-0.07	0.00
NODULE WEIGHT 2		-0.01	0.20	0.19	-0.17	-0.08	-0.38++	0.00
PLANT HEIGHT		0.02	0.02	0.37++	-0.09	0.08	-0.48++	0.00
LODGING		-0.08	0.23	0.37++	-0.05	0.02	0.02	0.00
SHATTER		1.00	-0.10	0.06	0.07	0.15	0.0	0.00
PLANTS HARVEST		-0.10	1.00	0.22	-0.09	-0.12	-0.16	0.00
PODS PER PLANT		0.06	0.22	1.00	0.02	-0.01	-0.44++	0.00
100 SEED WEIGHT		0.07	-0.09	0.02	1.00	0.11	-0.07	0.00
QUALITY OF SEED		0.15	-0.12	-0.01	0.11	1.00	-0.04	0.00
DISEASE I		0.0	-0.16	-0.44++	-0.07	-0.07	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 63 EXPERIMENT 408 YEAR 1975

REGION - AFRICA COUNTRY - ETHIOPIA  
 SITE - DEBRE ZEIT LATITUDE - 8 DEG. 55 MIN. N  
 COOPERATOR - W.W. YOHANNES ELEVATION - 1860 M  
 DATE PLANTED - JUNE 30, 1975 LONGITUDE - 38 DEG. 53 MIN. E  
 SOIL TYPE - SAND, CLAY, PH 7.0 DATE HARVESTED - NOVEMBER, 1975  
 FERTILIZER USED (KG/HA) - P 46.0  
 AMOUNT OF MOISTURE - 590 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	2246.70	60.00	131.00	403.00	661.50	3.03	5.60	66.25	1.75
13	WILLIAMS	1981.65	42.25	112.50	424.25	498.25	3.28	5.55	35.75	1.00
10	COLUMBUS	1828.28	40.00	130.50	406.00	648.75	3.18	7.05	55.75	1.25
11	CLARK 63	1640.74	40.75	113.00	367.75	430.50	3.05	4.93	38.50	1.00
12	WOODWORTH	1376.94	40.25	113.00	362.00	381.50	2.70	4.35	35.75	1.00
14	CALLAND	1320.26	44.00	128.00	229.50	352.75	2.95	4.53	38.50	1.00
5	AMSOY 71	1319.43	41.75	126.50	350.75	354.50	2.30	3.15	33.50	1.00
8	WELLS	1232.33	40.25	114.75	286.25	344.50	2.68	3.75	27.75	1.00
7	BERSON	1153.98	44.00	131.00	311.00	347.75	2.75	3.68	38.50	1.00
3	HARK	918.52	38.75	125.50	355.75	370.50	2.70	3.53	32.25	1.00
15	BONUS	607.20	39.75	130.25	344.00	450.50	2.90	4.87	39.25	1.00
1	ALTONA	365.91	38.75	113.00	320.00	241.00	2.68	2.30	27.75	1.00
2	HODGSON	228.38	42.50	127.00	272.75	235.75	1.85	1.90	21.00	1.00
4	SHIPT	215.46	38.00	114.75	283.00	279.75	1.65	2.33	22.00	1.00
6	CONSOY	62.93	43.50	127.75	347.75	319.00	2.08	2.30	25.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER	0.44++		0.44++	-0.01	0.27+	0.48++	0.36++	0.54++	0.75++	0.45++
DAYS TO MATURITY	0.44++		1.00	0.38++	0.08	0.33++	0.06	0.18	0.61++	0.66++
NODULE NUMBER 1	-0.01		0.38++	1.00	0.01	0.24	-0.01	0.14	0.39++	0.35++
NODULE NUMBER 2	0.27+		0.08	0.01	1.00	0.64++	0.82++	0.65++	0.31+	-0.00
NODULE WEIGHT 1	0.48++		0.33++	0.24	0.64++	1.00	0.65++	0.91++	0.59++	0.21
NODULE WEIGHT 2	0.36++		0.06	-0.01	0.82++	0.65++	1.00	0.77++	0.35++	0.00
PLANT HEIGHT	0.54++		0.18	0.14	0.65++	0.91++	0.35++	1.00	0.58++	0.15
PLANT LODGING	0.75++		0.61++	0.35++	0.31+	0.59++	0.35++	0.58++	1.00	0.66++
SHATTER	0.45++		0.66++	0.35++	-0.00	0.21	0.00	0.15	0.66++	1.00
HARVEST	-0.17		-0.06	-0.04	-0.20	0.25+	-0.07	-0.03	-0.08	-0.20
PODS PER PLANT	0.21		0.04	0.11	0.27+	0.25+	0.24	0.23	0.22	0.10
100 SEED WEIGHT	0.91++		0.42++	0.16	0.23	0.51++	0.34++	0.58++	0.78++	0.51++
QUALITY OF SEED	-0.06		-0.07	-0.34++	-0.01	-0.20	0.06	-0.15	-0.19	-0.19
DISEASE I	-0.25		0.07	0.08	-0.25	-0.16	-0.07	-0.17	0.03	0.04
DISEASE II	0.30+		-0.02	0.01	0.40++	0.41++	0.52++	0.51++	0.23	-0.08
DISEASE III	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 63 EXPERIMENT 408 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.25	185.00	36.75	15.20	2.75	42.4	14.9
13	WILLIAMS	1.25	174.00	25.25	17.95	1.25	43.1	16.4
10	COLUMBUS	1.00	186.25	34.75	14.00	2.00	47.1	16.1
11	CLARK 63	1.00	176.25	26.50	15.03	1.50	46.5	17.1
12	WOODWORTH	1.00	196.75	21.00	16.68	1.50	45.2	17.1
14	CALLAND	1.75	185.25	22.00	17.38	4.00	45.7	17.4
5	AMSOY 71	1.00	184.00	21.75	17.65	1.50	43.8	18.0
8	WELLS	1.75	188.00	23.00	14.18	2.25	45.2	17.7
7	BEESON	1.75	174.50	16.25	19.63	2.75	45.9	16.6
3	HARK	1.50	173.25	17.25	15.85	2.00	46.3	17.0
15	BONUS	2.00	183.25	17.75	13.95	3.00	48.7	16.7
1	ALTONA	1.50	178.75	8.00	18.03	4.00	45.6	15.3
4	HODGSON	1.00	162.75	6.50	17.85	1.75	43.6	18.7
2	SWIFT	1.50	167.75	6.25	16.78	3.00	43.3	17.4
6	CORSOY	1.00	192.00	1.25	14.33	2.00	45.0	16.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
GRAND MEAN 180.52 18.95 16.30 2.35 STANDARD ERROR OF A VARIETY MEAN 0.20 1.63 0.40 0.30 COEFFICIENT OF VARIATION 28.99% 7.69 4.95% 25.52% 5% LSD VARIETY MEANS (*****=NS) 0.56 ***** 1.15 0.86								
C O R R E L A T I O N S								
(+ - PROB=-.05      +- - PROB=-.01)								
YIELD	KG/HA	-0.17	0.21	0.91++	-0.06	-0.25	0.30+	0.00
DAYS TO FLOWER		-0.06	0.04	0.42++	-0.07	0.07	-0.02	0.00
DAYS TO MATURITY		-0.04	0.11	0.16	-0.34++	0.08	0.01	0.00
NODULE NUMBER 1		-0.20	0.27+	0.23	-0.01	-0.25	0.40++	0.00
NODULE NUMBER 2		-0.07	0.25+	0.51++	-0.20	-0.16	0.41++	0.00
NODULE WEIGHT 1		-0.07	0.24	0.34++	0.06	-0.07	0.52++	0.00
NODULE WEIGHT 2		-0.03	0.23	0.58++	-0.15	-0.17	0.51++	0.00
PLANT HEIGHT		-0.08	0.22	0.78++	-0.19	0.03	0.23	0.00
LODGING		-0.20	0.10	0.51++	-0.19	0.04	-0.08	0.00
SHATTER		1.00	0.06	-0.07	-0.04	0.44++	-0.22	0.00
PLANTS HARVEST		0.06	1.00	0.16	-0.17	0.03	0.11	0.00
PODS PER PLANT		-0.07	0.16	1.00	-0.27+	-0.17	0.30+	0.00
100 SEED WEIGHT		-0.04	-0.17	-0.27+	1.00	0.13	-0.12	0.00
QUALITY OF SEED		0.44++	0.03	-0.17	0.13	1.00	-0.28+	0.00
DISEASE I		-0.22	0.11	0.30+	-0.12	-0.28+	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 64 EXPERIMENT 417 YEAR 1975

REGION - AFRICA COUNTRY - ETHIOPIA  
 SITE - DEMBERE KFILA ELEVATION - 1860 M  
 LATITUDE - 6 DEG. 45 MIN. N LONGITUDE - 38 DEG. 20 MIN. E  
 COOPERATORS - DEMISSIE MITIKU, TITAS LEGATOS  
 DATE PLANTED - JUNE 10, 1975 DATE HARVESTED - DECEMBER, 1975  
 SOIL TYPE - CLAY LOAM  
 FERTILIZER USED (KG/HA) - N 18.0, P 46.0

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
2	HARDEE	1054.38	111.50	170.75	236.00	364.00	3.43	5.58	5.58	74.75	0.00
5	BOSSIER	1021.04	79.25	165.00	333.00	408.50	4.48	5.55	5.55	61.25	0.00
6	DAVIS	971.03	85.75	164.50	260.75	292.50	3.70	4.70	4.70	63.25	0.00
12	WILLIAMS	958.52	54.25	166.00	320.75	249.00	3.75	4.05	4.05	44.50	0.00
7	TRACY	887.68	63.75	162.00	233.00	229.00	3.03	2.95	2.95	44.75	0.00
8	FORREST	558.44	78.75	169.50	359.25	351.00	3.38	4.72	4.72	71.25	0.00
4	COBR	525.10	86.25	168.00	294.75	280.75	3.30	4.73	4.73	66.00	0.00
14	SEMMES	500.10	80.50	168.75	307.75	247.00	2.58	3.48	3.48	64.00	0.00
11	WOODWORTH	337.57	55.50	166.75	159.50	114.50	1.58	1.88	1.88	40.25	0.00
1	HAMPTON 266A	333.40	80.50	169.50	449.75	362.50	3.90	4.68	4.68	50.25	0.00
10	CLARK 63	329.23	98.25	170.00	220.75	182.50	3.40	3.20	3.20	50.25	0.00
9	COLUMBUS	325.06	62.25	167.25	563.75	361.50	6.05	5.83	5.83	62.75	0.00
13	CALLAND	262.55	54.25	140.75	226.75	272.50	4.23	4.90	4.90	51.50	0.00
3	IMPROVED PELICAN	229.21	121.50	200.00	301.50	322.50	3.73	3.70	3.70	110.00	0.00
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN		592.38	76.59	167.77	304.80	288.41	3.61	4.28	4.28	61.05	0.00
COEFFICIENT OF VARIATION		88.09	0.92	6.68	49.44	49.73	0.55	0.66	0.66	2.03	0.00
5% LSD VARIETY MEANS (*****=NS)		29.74%	2.40%	7.96%	32.44%	34.48%	30.57%	30.67%	30.67%	6.65%	0.00%
		251.77	2.62	19.10	141.32	142.13	1.58	1.88	1.88	5.80	0.00
C O R R E L A T I O N S											
(* - PROB=.05 ** - PROB=.01)											
YIELD	KG/HA	1.00	0.13	-0.10	-0.13	0.17	-0.02	0.12	0.12	-0.12	0.00
DAYS TO FLOWER	1.00	0.50++	0.03	0.50++	0.03	0.34++	-0.00	0.18	0.18	0.85++	0.00
DAYS TO MATURITY	0.13	0.50++	0.03	1.00	0.14	0.09	0.04	-0.07	0.48++	0.00	0.00
NODULE NUMBER 1	0.03	0.03	0.14	0.09	1.00	0.33+	0.77++	0.48++	0.17	0.00	0.00
NODULE NUMBER 2	0.17	0.34++	0.09	0.33+	0.33+	1.00	0.36++	0.78++	0.34++	0.00	0.00
NODULE WEIGHT 1	-0.02	-0.00	0.04	0.04	0.77++	0.36++	1.00	0.52++	0.17	0.00	0.00
NODULE WEIGHT 2	0.12	0.18	-0.07	0.48++	0.48++	0.73++	0.52++	1.00	0.23	0.00	0.00
PLANT	HEIGHT	-0.12	0.85++	0.48++	0.17	0.34++	0.17	0.23	1.00	0.00	1.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.05	-0.05	-0.16	-0.15	-0.15	0.09	-0.04	0.04	0.07	0.00	0.00
HARVEST	0.03	-0.19	-0.15	-0.15	-0.06	-0.11	-0.00	-0.05	-0.02	0.00	0.00
PODS PER PLANT	0.52++	0.56++	0.15	-0.00	0.06	0.29+	0.07	0.30+	0.42++	0.00	0.00
100 SEED WEIGHT	0.32+	-0.42++	-0.38++	0.05	-0.14	-0.02	-0.08	-0.02	-0.52++	0.00	0.00
QUALITY OF SEED	-0.46++	-0.01	0.04	0.20	-0.02	0.30+	0.00	0.00	0.19	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 64 EXPERIMENT 417 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PPR PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
2	HARDFE	2.00	143.75	31.48	14.35	3.25	44.2	15.1
5	BOSSIER	1.75	178.25	25.25	16.35	2.25	47.5	17.9
6	DAVIS	1.50	210.25	20.83	20.05	3.75	45.9	15.1
12	WILLIAMS	2.25	196.00	15.75	19.80	2.50	45.5	16.8
7	TRACY	2.00	190.50	15.20	17.00	2.50	45.7	14.2
8	FORREST	2.00	190.50	19.53	18.50	3.00	42.2	17.9
4	COBB	3.25	168.50	34.35	16.33	2.75	42.7	17.7
14	SEMMES	2.25	208.25	17.18	18.93	2.50	--	--
11	WOODWORTH	1.00	182.50	8.45	16.20	3.00	43.5	17.4
1	HAMPTON 266A	2.00	170.75	10.05	17.73	3.50	44.9	15.2
10	CLARK 63	1.75	157.75	12.30	14.65	3.75	45.2	17.8
9	COLOMBUS	1.75	185.00	13.85	15.10	4.75	48.6	16.4
13	CALLAND	3.00	193.75	7.02	15.95	4.75	47.0	17.0
3	IMPROVED PELICAN	2.00	188.75	18.90	10.68	4.00	46.8	16.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	-0.05	0.03	0.52++	0.32+	-0.46++	0.00	0.00
DAYS TO FLOWER		0.05	-0.19	0.56++	-0.42++	-0.01	0.00	0.00
DAYS TO MATURITY		-0.16	-0.15	0.15	-0.38++	0.04	0.00	0.00
NODULE NUMBER 1		-0.15	0.06	-0.00	0.05	0.20	0.00	0.00
NODULE NUMBER 2		0.09	-0.11	0.29+	-0.14	-0.02	0.00	0.00
NODULE WEIGHT 1		-0.04	-0.00	0.07	-0.08	0.30+	0.00	0.00
NODULE WEIGHT 2		0.04	-0.05	0.30+	-0.02	0.09	0.00	0.00
PLANT HEIGHT		0.07	-0.02	0.42++	-0.52++	0.19	0.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	-0.12	0.22	-0.02	-0.02	0.00	0.00
PLANTS HARVEST		-0.12	1.00	-0.19	0.36++	0.02	0.00	0.00
PODS PPR PLANT		0.22	-0.19	1.00	-0.07	-0.33+	0.00	0.00
100 SEED WEIGHT		-0.02	0.36++	-0.07	1.00	-0.32+	0.00	0.00
QUALITY OF SEED		-0.02	0.02	-0.33+	-0.32+	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 65

EXPERIMENT 416

YEAR 1975

REGION - AFRICA

SITE - JIMMA

LATITUDE - 7 DEG. 46 MIN. N

COOPERATORS - G.M. SHEKOUR, G.E. ANDE

DATE PLANTED - JUNE 13, 1975

SOIL PH 6.2

FERTILIZER USED (KG/HA) - P 36.8

AMOUNT OF MOISTURE - 851 MM

LOCAL VARIETY - KWANKYO

COUNTRY - ETHIOPIA

ELEVATION - 1756 M

LONGITUDE - 36 DEG. E

DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	MODULE WEIGHT 2	PLANT HEIGHT	MODULE WEIGHT 2	PLANT HEIGHT	MODULE WEIGHT 2	PLANT HEIGHT
9	FORREST	1130.23	77.00	176.00	107.50	76.00	0.00	0.00	41.60	0.00	41.60	0.00	41.60	0.00	41.60
14	CALLAND	957.69	77.00	176.00	89.50	58.25	0.00	0.00	34.25	0.00	34.25	0.00	34.25	0.00	34.25
4	IMPROVED PELICAN	866.01	90.00	190.00	82.00	130.75	0.00	0.00	61.20	0.00	61.20	0.00	61.20	0.00	61.20
2	HAMPTON 266A	835.17	77.00	170.00	202.50	159.00	0.00	0.00	30.35	0.00	30.35	0.00	30.35	0.00	30.35
5	COBB	795.16	77.00	170.00	108.00	79.75	0.00	0.00	33.15	0.00	33.15	0.00	33.15	0.00	33.15
10	COLUMBUS	745.98	56.00	162.00	116.00	94.50	0.00	0.00	30.60	0.00	30.60	0.00	30.60	0.00	30.60
7	DAVIS	705.97	89.00	176.00	102.00	76.75	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
15	KWANKYO	621.79	57.00	170.00	113.50	96.25	0.00	0.00	31.70	0.00	31.70	0.00	31.70	0.00	31.70
13	WILLIAMS	582.62	56.00	153.00	167.00	51.75	0.00	0.00	21.95	0.00	21.95	0.00	21.95	0.00	21.95
11	CLARK 63	571.78	56.00	153.00	136.00	77.25	0.00	0.00	1.50	0.00	1.50	0.00	1.50	0.00	1.50
6	ROSSIER	564.28	65.00	162.00	144.00	95.75	0.00	0.00	28.20	0.00	28.20	0.00	28.20	0.00	28.20
1	JUPITER	440.92	110.00	224.00	126.00	117.75	0.00	0.00	100.40	0.00	100.40	0.00	100.40	0.00	100.40
12	WOODNORTH	407.58	56.00	153.00	149.50	78.00	0.00	0.00	22.50	0.00	22.50	0.00	22.50	0.00	22.50
8	TRACY	333.40	57.00	153.00	136.00	49.25	0.00	0.00	25.55	0.00	25.55	0.00	25.55	0.00	25.55
3	HARDEF	324.23	56.00	153.00	130.50	43.25	0.00	0.00	16.10	0.00	16.10	0.00	16.10	0.00	16.10
GRAND MEAN															
STANDARD ERROR OF A VARIETY MEAN															
COEFFICIENT OF VARIATION															
5% LSD VARIETY MEANS (*****=NS)															
C O R R E L A T I O N S															
(+ - PROB=.05      +- - PROB=.01)															
YIELD	KG/HA	1.00	0.24	0.18	-0.09	0.23	0.00	0.00	0.16	0.00	0.16	0.00	0.16	0.00	0.16
DAYS TO FLOWER	0.24	0.24	1.00	0.93++	-0.26+	0.39++	0.00	0.00	0.84++	0.00	0.84++	0.00	0.84++	0.00	0.84++
DAYS TO MATURITY	0.18	0.93++	1.00	1.00	-0.28+	0.41++	0.00	0.00	0.95++	0.00	0.95++	0.00	0.95++	0.00	0.95++
MODULE NUMBER 1	-0.09	-0.26+	-0.28+	1.00	0.13	0.00	0.00	0.00	-0.21	0.00	-0.21	0.00	-0.21	0.00	-0.21
MODULE NUMBER 2	0.23	0.39++	0.41++	0.00	0.00	1.00	0.00	0.00	0.40++	0.00	0.40++	0.00	0.40++	0.00	0.40++
MODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.16	0.84++	0.95++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LOGGING	-0.31+	-0.34++	-0.18	0.08	-0.21	0.40++	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
SHATTER	0.02	0.19	0.42++	0.08	0.08	-0.05	0.00	0.00	-0.13	0.00	-0.13	0.00	-0.13	0.00	-0.13
HARVEST	0.02	-0.07	-0.17	-0.18	-0.24	0.20	0.00	0.00	0.38++	0.00	0.38++	0.00	0.38++	0.00	0.38++
PLANT	0.55++	0.77++	0.77++	-0.18	0.30+	0.38++	0.00	0.00	-0.19	0.00	-0.19	0.00	-0.19	0.00	-0.19
PODS PER	100 SEED	-0.24	-0.64++	-0.50++	0.30+	-0.20	0.00	0.00	0.77++	0.00	0.77++	0.00	0.77++	0.00	0.77++
QUALITY	OF SEED	-0.16	0.32+	0.48++	0.05	0.00	0.00	0.00	-0.47++	0.00	-0.47++	0.00	-0.47++	0.00	-0.47++
DISEASE	I	-0.36++	-0.47++	-0.45++	0.33++	-0.16	0.00	0.00	0.54++	0.00	0.54++	0.00	0.54++	0.00	0.54++
DISEASE	II	-0.35++	-0.46++	-0.54++	0.26+	-0.25	0.00	0.00	-0.40++	0.00	-0.40++	0.00	-0.40++	0.00	-0.40++
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.52++	0.00	-0.52++	0.00	-0.52++	0.00	-0.52++
DISEASE	IV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 65 EXPERIMENT 416 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
0	FORREST	1.00	198.00	16.50	16.00	1.25	42.6	19.1
14	CALLAND	1.50	181.50	10.75	16.50	1.25	--	--
4	IMPROVED PPLICAN	2.50	192.50	19.75	14.00	1.25	46.3	17.4
2	HAMPTON 266A	1.00	183.75	13.50	17.00	1.00	41.8	18.1
5	COBE	1.25	190.00	15.25	16.50	1.00	41.3	18.3
10	COLUMBUS	1.25	199.75	9.75	17.50	1.00	47.5	16.8
7	DAVIS	1.00	206.75	12.00	16.00	1.50	43.3	19.4
15	KWANKYO	3.75	180.75	10.25	20.00	2.00	45.3	15.5
13	WILLIAMS	1.25	191.00	7.25	20.00	1.25	46.3	17.9
11	CLARK 63	1.00	184.25	4.75	18.50	1.75	46.8	15.3
6	BOSSIER	1.75	195.75	10.75	17.00	1.00	46.8	18.4
1	JUPITER	2.50	170.75	20.50	16.00	3.00	41.7	19.1
12	WOODWORTH	1.25	192.50	6.25	18.25	1.25	46.5	17.4
8	TRACY	1.25	186.25	6.75	16.00	1.75	47.1	14.2
3	HARDEE	1.00	179.50	6.00	18.25	1.50	17.4	47.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.55	188.87	11.33	17.17	1.45		
COEFFICIENT OF VARIATION		0.25	6.36	1.57	0.41	0.20		
5% LSD VARIETY MEANS (*****=NS)		31.79%	6.74%	27.74%	4.78%	28.02%		
		0.70	18.15	4.49	1.17	0.58		
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.09	0.02	0.55++	-0.24	-0.16	-0.36++	-0.35++
DAYS TO FLOWER		0.19	-0.07	0.77++	-0.64++	0.32+	-0.47++	-0.46++
DAYS TO MATURITY		0.42++	-0.17	0.77++	-0.50++	0.48++	-0.45++	-0.54++
NODULE NUMBER 1		-0.24	-0.18	-0.18	0.30+	0.05	0.33+	0.26+
NODULE NUMBER 2		0.20	-0.07	0.38++	-0.20	0.00	-0.16	-0.25
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.38++	-0.19	0.77++	-0.47++	0.54++	-0.40++	-0.52++
LODGING		0.14	-0.29+	-0.29+	0.40++	0.02	0.18	0.16
SHATTER		1.00	-0.13	0.24	0.03	0.35++	-0.10	-0.25+
PLANTS HARVEST		-0.13	1.00	-0.15	-0.05	-0.31+	-0.09	0.13
PODS PER PLANT		0.24	-0.15	1.00	-0.56++	0.16	-0.48++	-0.56++
100 SEED WEIGHT		0.03	-0.05	-0.56++	1.00	0.01	0.32+	0.32+
QUALITY OF SEED		0.35++	-0.31+	0.16	0.01	1.00	0.00	-0.08
DISEASE I		-0.10	-0.09	-0.48++	0.32+	0.00	1.00	0.65++
DISEASE II		-0.25+	0.13	-0.56++	0.32+	-0.08	0.65++	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 66

EXPERIMENT 399

YEAR 1975

REGION - AFRICA  
 SITE - YUNDUM  
 LATITUDE - 13 DEG. 20 MIN. N  
 COOPERATOR - I.A.K. ANDERSON  
 DATE PLANTED - AUGUST 1, 1975  
 SOIL TYPE - SAND 57.2%, SILT 34.9%, CLAY 8.0%, PH 5.6  
 FERTILIZER USED (KG/HA) - P 80.8, K 80.5  
 AMOUNT OF MOISTURE - 1267 MM

COUNTRY - GAMBIA  
 ELEVATION - 26 M  
 LONGITUDE - 16 DEG. 40 MIN. W

DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	935.60	30.00	96.50	226.75	318.00	2.31	6.71	32.50	1.25
13	WILLIAMS	596.78	30.00	97.75	199.25	391.25	2.31	7.13	36.00	1.25
12	WOODWORTH	578.87	30.00	76.00	192.00	307.50	1.95	5.75	35.50	1.00
15	SEMME	576.78	30.00	101.75	172.00	268.75	1.82	3.51	25.50	1.25
10	COLUMBUS	574.28	30.00	91.25	262.00	338.00	2.71	6.47	35.50	1.25
8	TRACY	574.28	30.00	81.25	162.25	130.25	1.37	2.57	32.00	1.00
11	CLARK 63	533.86	30.00	91.25	196.75	315.00	2.20	6.00	33.00	1.25
6	ROSSIER	476.35	31.50	100.50	258.75	332.50	2.18	6.01	33.00	1.25
1	JUPIITER	465.09	38.00	110.00	227.00	265.00	1.75	4.05	62.00	1.25
9	FORREST	445.09	30.00	91.75	158.00	284.25	1.40	4.31	28.25	1.00
14	CALLAND	419.25	32.00	91.00	164.50	328.75	2.06	6.18	39.00	1.00
2	HAMPTON 266A	320.48	30.00	110.00	293.00	386.25	2.35	5.10	27.00	1.00
5	COBB	262.14	31.50	109.50	201.25	276.50	2.21	5.98	41.75	1.00
3	HARDEE	91.68	38.00	126.00	223.75	353.00	1.96	6.37	25.75	1.00
4	IMPROVED PELICAN	58.34	38.00	126.00	200.00	299.00	1.74	3.95	49.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05    ++ - PROB=.01)										
YIELD	KG/HA									
DAYS TO FLOWER		1.00	-0.55++	-0.64++	-0.07	0.05	0.20	0.18	-0.12	0.29+
DAYS TO MATURITY		-0.55++	1.00	0.72++	0.07	-0.03	-0.17	-0.12	0.51++	-0.06
NODULE NUMBER 1		-0.64++	0.72++	1.00	0.26+	0.15	0.03	-0.01	0.22	-0.06
NODULE NUMBER 2		-0.07	0.07	0.26+	1.00	0.35++	0.47++	0.22	0.08	0.06
NODULE WEIGHT 1		0.05	-0.03	0.15	0.35++	1.00	0.29+	0.68++	-0.06	-0.03
NODULE WEIGHT 2		0.20	-0.17	0.03	0.47++	0.29+	1.00	0.52++	-0.02	0.18
NODULE HEIGHT		0.18	-0.12	-0.01	0.22	0.68++	0.52++	1.00	-0.03	0.05
PLANT		-0.12	0.51++	0.22	0.08	-0.06	-0.02	-0.03	1.00	-0.03
LODGING		0.29+	-0.06	-0.06	0.06	-0.03	0.18	0.05	-0.03	1.00
SHATTER		-0.60++	0.56++	0.86++	0.36++	0.16	0.11	0.01	0.23	-0.02
PLANTS		0.48++	-0.22	-0.14	0.03	0.13	0.03	0.10	0.15	0.13
PODS PER PLANT		-0.14	0.66++	0.56++	0.25	-0.08	-0.01	-0.17	0.61++	0.12
100 SEED WEIGHT		0.43++	-0.27+	-0.37++	0.08	0.09	0.21	0.15	0.04	0.00
QUALITY OF SEED		-0.54++	0.25	0.44++	-0.09	0.10	-0.07	-0.04	-0.13	-0.17
DISEASE I		0.02	-0.18	-0.00	0.03	0.07	0.35++	0.08	-0.10	-0.26+
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 66

EXPERIMENT 399

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
7	DAVIS	1.50	126.00	21.05	14.56	3.00	46.3	21.8
13	WILLIAMS	2.25	114.00	15.88	15.17	2.50	48.1	21.3
12	WOODWORTH	1.00	105.50	15.58	15.39	2.25	46.1	21.2
15	SEMPFS	1.75	118.25	23.90	11.71	3.00	47.6	20.6
10	COLUMBUS	1.50	118.50	16.20	13.63	3.00	45.8	21.1
8	MACY	1.00	114.00	15.28	14.66	2.75	47.1	19.6
11	CLARK 63	1.25	92.75	14.85	14.42	2.75	47.4	20.1
6	BOSSIER	2.00	119.00	20.72	12.54	2.75	45.6	21.0
1	JUPITER	3.00	111.25	41.65	13.12	2.75	46.7	21.1
9	FORREST	1.00	113.75	17.47	8.90	4.50	46.7	20.2
14	GALLAND	1.25	110.00	16.50	12.70	4.00	48.5	20.4
2	HAMPTON 266A	4.00	108.50	20.40	13.29	4.00	47.5	21.9
5	COBR	3.75	118.50	22.30	11.95	3.75	46.4	21.5
3	HADDEE	4.00	88.00	26.50	12.21	4.50	47.1	21.3
4	IMPROVED PELICAN	3.75	110.00	23.55	9.54	4.00	47.5	20.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		2.20	111.20	20.79	12.92	3.30		
COEFFICIENT OF VARIATION		0.23	8.34	1.75	1.02	0.33		
5% LSD VARIETY MEANS (*****=NS)		20.77%	15.00%	16.80%	15.85%	20.11%		
		0.65	*****	4.99	2.93	0.95		
C O R R E L A T I O N S								
		(+ - PROR=-.05      ++ - PROR=+.01)						
YIELD	KG/HA	-0.60++	0.48++	-0.14	0.43++	-0.54++	0.02	0.00
DAYS TO FLOWER		0.56++	-0.22	0.66++	-0.27+	0.25	-0.18	0.00
DAYS TO MATURITY		0.86++	-0.14	0.56++	-0.37++	0.44++	-0.00	0.00
NODULE NUMBER 1		0.36++	0.03	0.25	0.08	-0.09	0.03	0.00
NODULE NUMBER 2		0.16	0.13	-0.08	0.09	0.10	0.07	0.00
NODULE WEIGHT 1		0.11	0.03	-0.01	0.21	-0.07	0.35++	0.00
NODULE WEIGHT 2		0.01	0.10	-0.17	0.15	-0.04	0.08	0.00
PLANT HEIGHT		0.23	0.15	0.61++	0.04	-0.13	-0.10	0.00
LOADING		-0.02	0.13	0.12	0.00	-0.17	-0.26+	0.00
SHATTER		1.00	-0.04	0.52++	-0.18	0.34++	0.09	0.00
PLANTS HARVEST		-0.04	1.00	0.06	0.05	-0.19	-0.01	0.00
PODS PER PLANT		0.52++	0.06	1.00	-0.04	0.05	-0.28+	0.00
WEIGHT		-0.18	0.05	-0.04	1.00	-0.46++	0.19	0.00
100 SEED QUALITY OF SEED		0.34++	-0.19	0.05	-0.06++	1.00	-0.00	0.00
DISEASE I		0.09	-0.01	-0.28+	0.19	-0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	1.00	0.00
							1.00	1.00



TABLE 67 EXPERIMENT 410 YEAR 1975

REGION - AFRICA COUNTRY - GHANA  
 SITE - LEGON FARM ELEVATION - 60 M  
 LATITUDE - 5 DEG. 39 MIN. N LONGITUDE - 0 DEG. 11 MIN. W  
 COOPERATOR - R.B. DADSON  
 DATE PLANTED - MAY 22, 1975 DATE HARVESTED - AUGUST, 1975  
 SOIL PH 5.2  
 AMOUNT OF MOISTURE - 372 MM  
 NUMBER OF IRRIGATIONS - 6  
 LOCAL VARIETY - CES 407

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
7	DAVIS	3158.96	34.00	95.50	73.25	121.75	0.67	1.55	0.67	1.55	34.10	1.00
13	WILLIAMS	3116.87	28.00	92.00	84.50	216.50	0.29	1.87	0.29	1.87	53.10	1.95
10	COLUMBUS	3038.94	28.00	92.00	61.25	151.75	0.29	1.75	0.29	1.75	53.03	1.25
9	FORREST	2881.41	34.00	94.25	106.50	245.75	0.88	2.38	0.88	2.38	36.78	1.75
14	CES 407	2858.49	28.00	99.00	53.00	212.00	0.44	1.95	0.44	1.95	66.23	1.00
3	HARDEE	2710.54	34.00	97.75	89.00	220.25	0.97	2.64	0.97	2.64	31.28	1.00
12	WOODWORTH	2561.76	28.00	85.25	53.75	128.75	0.20	1.59	0.20	1.59	50.20	2.25
2	HAMPTON 266A	2506.75	34.00	97.25	99.00	173.75	0.72	1.44	0.72	1.44	31.23	1.50
11	CLARK 63	2476.75	28.00	92.00	60.50	192.00	0.25	2.02	0.25	2.02	44.20	1.75
1	JUPITER	2429.24	41.00	103.50	42.00	86.75	0.18	0.58	0.18	0.58	62.35	1.25
5	COBB	2412.98	34.00	95.50	95.25	151.75	0.94	1.66	0.94	1.66	29.73	1.00
6	BOSSIER	2350.47	37.50	97.25	88.50	135.50	0.53	1.47	0.53	1.47	35.00	2.00
4	IMPROVED PELICAN	2275.62	41.00	99.00	68.25	174.50	0.43	1.16	0.43	1.16	71.48	2.25
8	TRACY	1987.48	34.00	87.00	113.25	165.25	1.42	2.30	1.42	2.30	28.33	1.50
15	SENNES	1187.74	34.00	100.00	154.00	300.75	1.04	2.03	1.04	2.03	35.70	1.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% ISI VARIETY MEANS (*****=NS)												
CORRELATION COEFFICIENTS												
YIELD KG/HA												
DAYS TO FLOWER												
DAYS TO MATURITY												
NODULE NUMBER 1												
NODULE NUMBER 2												
NODULE WEIGHT 1												
NODULE WEIGHT 2												
PLANT HEIGHT												
LOGGING												
SHATTER												
HARVEST												
PLANTS PER												
100 SEED WEIGHT												
QUALITY OF SEED												
PLANT HEIGHT												
LOGGING												
SHATTER												
HARVEST												
PLANTS PER												
100 SEED WEIGHT												
QUALITY OF SEED												

TABLE 67 EXPERIMENT 410 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	DAVIS	1.00	178.75	29.25	20.29	1.50
13	WILLIAMS	1.00	130.75	37.20	20.79	2.00
10	COLUMBUS	1.00	163.50	40.67	19.47	2.75
9	FORREST	1.00	192.50	35.22	17.67	3.00
14	CES 407	1.00	134.00	34.75	20.78	2.75
3	HARDEE	1.00	145.75	36.72	19.34	1.00
12	WCCLOWETH	1.00	156.00	25.83	19.11	2.25
2	HAMPTON 266A	1.00	155.50	27.25	21.20	3.25
11	CLARK 63	1.00	144.25	34.75	17.30	2.25
1	JUPITER	1.00	130.00	34.92	19.27	5.00
5	COEB	1.00	154.50	32.80	20.22	1.00
6	BOSSIER	1.00	156.50	29.78	19.61	1.75
4	IMPROVED PELICAN	1.00	145.50	45.17	16.03	1.25
8	TRACY	1.00	161.50	23.68	21.47	2.50
15	SEMMES	1.00	159.75	28.85	22.31	3.50
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	153.92	33.12	19.65	2.38
COEFFICIENT OF VARIATION		0.00	6.84	3.24	0.89	0.43
5% ISI VARIETY MEANS (*****=NS)		0.00%	8.89%	19.57%	9.05%	35.89%
		0.00	19.52	9.25	2.54	1.22
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.07	0.28+	0.01	-0.09
DAYS TO FLOWER		0.00	0.01	0.09	-0.15	0.10
DAYS TO MATURITY		0.00	-0.14	0.24	0.15	0.10
NCULE NUMBER 1		0.00	0.20	-0.10	0.32+	0.04
NCULE NUMBER 2		0.00	0.02	0.04	0.15	0.05
NCULE WEIGHT 1		0.00	0.29+	-0.24	0.28+	-0.00
NCULE WEIGHT 2		0.00	0.17	-0.17	0.11	-0.21
PLANT HEIGHT		0.00	-0.47++	0.52++	-0.17	0.22
LCDDING		0.00	-0.01	0.04	-0.11	-0.11
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.31+	0.02	-0.13
PODS PER PLANT		0.00	-0.31+	1.00	-0.32+	-0.06
100 SEED WEIGHT		0.00	0.02	-0.32+	1.00	0.10
QUALITY CF SEED		0.00	-0.13	-0.06	0.10	1.00

TABLE 68 EXPERIMENT 670 YEAR 1975

REGION - AFRICA  
 SITE - AEDJAN  
 LATITUDE - 5 DEG. 15 MIN. N  
 COOPERATORS - A.D. ASSA, K.G. EDI  
 DATE PLANTED - JULY 26, 1975  
 SOIL TYPE - SAND

COUNTRY - IVORY COAST  
 ELEVATION - 0 M  
 LONGITUDE - 4 DEG. W  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	MODUL WEIGHT 1	MODUL WEIGHT 2	PLANT HEIGHT	LOGGING
5	COBB	1046.25	31.75	88.25	0.00	0.00	0.00	0.00	20.50	1.00
1	JUPITER	122.91	35.25	129.00	0.00	0.00	0.00	0.00	52.00	1.00
15	SEMES	1010.00	32.00	91.75	0.00	0.00	0.00	0.00	22.75	1.00
14	CALLAND	985.83	26.50	88.50	0.00	0.00	0.00	0.00	31.75	1.00
2	HAMPTON 266A	933.75	30.00	91.00	0.00	0.00	0.00	0.00	23.25	1.00
8	TRACY	883.33	27.75	78.00	0.00	0.00	0.00	0.00	21.75	1.00
11	CLARK 63	637.50	27.75	79.00	0.00	0.00	0.00	0.00	22.25	1.00
4	IMPROVED PELICAN	515.83	36.00	87.25	0.00	0.00	0.00	0.00	27.25	1.00
12	WOODWORTH	504.58	26.50	71.50	0.00	0.00	0.00	0.00	21.00	1.00
7	DAVIS	352.50	34.00	87.00	0.00	0.00	0.00	0.00	16.25	1.00
3	HARDEE	303.33	35.50	84.75	0.00	0.00	0.00	0.00	15.50	1.00
6	BOSSIER	274.16	32.25	86.75	0.00	0.00	0.00	0.00	17.50	1.00
13	WILLIAMS	257.08	28.00	77.75	0.00	0.00	0.00	0.00	16.75	1.00
10	COLUMBUS	250.83	30.00	79.50	0.00	0.00	0.00	0.00	16.50	1.00
9	FORREST	145.00	32.00	80.50	0.00	0.00	0.00	0.00	19.50	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
YIELD KG/HA										
DAYS TO FLOWER										
DAYS TO MATURITY										
NODULE NUMBER 1										
NODULE NUMBER 2										
NODULE WEIGHT 1										
NODULE WEIGHT 2										
PLANT HEIGHT										
LOGGING										
SHATTER										
PLANTS HARVEST										
PODS PER PLANT										
100 SEED WEIGHT										
QUALITY OF SEED										
YIELD KG/HA										
DAYS TO FLOWER										
DAYS TO MATURITY										
NODULE NUMBER 1										
NODULE NUMBER 2										
NODULE WEIGHT 1										
NODULE WEIGHT 2										
PLANT HEIGHT										
LOGGING										
SHATTER										
PLANTS HARVEST										
PODS PER PLANT										
100 SEED WEIGHT										
QUALITY OF SEED										

ENTY NUMEFF	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	COBB	1.00	243.50	8.65	15.00	3.75
1	JUPITER	1.00	262.00	15.45	23.75	5.00
15	SEMMES	1.00	240.25	9.35	21.00	2.50
14	CALLAND	1.00	246.75	8.75	23.25	3.50
2	HAMPTON 266A	1.00	273.50	9.45	20.25	3.50
8	TRACY	1.00	275.25	7.12	19.75	2.50
11	CLARK 63	1.00	199.75	7.35	18.75	2.75
4	IMPROVED PELICAN	1.00	239.25	8.38	14.25	3.00
12	WOODWORTH	1.00	249.50	4.28	17.50	2.75
7	DAVIS	1.00	232.50	3.70	16.00	2.75
3	HARDEE	1.00	234.50	5.77	14.50	4.00
6	BOSSIER	1.00	197.50	4.68	14.75	2.75
13	WILLIAMS	1.00	219.25	3.28	18.25	3.50
10	COLUMBUS	1.00	186.50	3.53	18.25	3.50
9	FOREST	1.00	184.00	3.68	12.75	3.50
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	232.07	6.89	17.87	3.28
COEFFICIENT OF VARIATION		0.00	20.92	2.09	1.04	0.61
5% ISI VARIETY MEANS (*****=NS)		0.00	18.03%	60.66%	11.67%	37.05%
C C R R E L A T I O N S						
		(+ - PROB=.05		++ - PROB=.01)		
YIELD		0.00		0.48++		
DAYS TO FLOWER		0.00	-0.04	0.77++	0.62++	0.01
DAYS TO MATURITY		0.00	0.34++	0.06	-0.38++	0.24
NODULE NUMBER 1		0.00	0.00	0.69++	0.47++	0.32+
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
HEIGHT		0.00	0.35++	0.77++	0.62++	0.24
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.41++	0.41++	0.13
PLANTS		0.00	0.41++	1.00	0.57++	0.25
PODS PER		0.00	0.41++	0.57++	1.00	0.06
100 SEED		0.00	0.13	0.25	0.06	1.00
QUALITY OF SEED		0.00	0.13	0.25	0.06	1.00



TABLE 69

EXPERIMENT 461

YEAR 1975

REGION - AFRICA  
 SITE - BADIKAHA  
 LATITUDE - 9 DEG. 30 MIN. N  
 COORDINATES - A.D. ASSA, R. IALIC  
 DATE PLANTED - JULY 25, 1975  
 SCIL TYPE - SILT

COUNTRY - IVORY COAST  
 ELEVATION - 300 M  
 LONGITUDE - 5 DEG. W

DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
5	FORREST	1053.75	39.00	83.00	0.00	0.00	0.00	0.00	25.25	1.00
3	HARDEE	1020.83	30.00	90.00	0.00	0.00	0.00	0.00	21.18	1.00
7	DAVIS	970.83	39.00	97.00	0.00	0.00	0.00	0.00	21.98	1.00
15	SEMMES	900.00	34.00	90.00	0.00	0.00	0.00	0.00	18.35	1.00
5	COBB	887.50	30.00	92.00	0.00	0.00	0.00	0.00	20.75	1.00
1	JUPITER	868.75	40.00	105.00	0.00	0.00	0.00	0.00	44.95	1.00
13	WILLIAMS	816.67	30.00	89.00	0.00	0.00	0.00	0.00	20.80	1.00
6	BOSSIER	810.42	32.00	91.00	0.00	0.00	0.00	0.00	18.25	1.00
2	HAMPTON 266A	712.50	34.00	90.00	0.00	0.00	0.00	0.00	20.45	1.00
11	CIARK 63	675.00	31.00	89.00	0.00	0.00	0.00	0.00	18.40	1.00
4	IMPROVED PELICAN	618.75	37.00	89.00	0.00	0.00	0.00	0.00	30.08	1.00
12	WOODWORTH	610.42	29.00	89.00	0.00	0.00	0.00	0.00	17.83	1.00
10	COLOMBUS	591.66	33.00	89.00	0.00	0.00	0.00	0.00	20.63	1.00
8	TRACY	572.92	32.00	90.00	0.00	0.00	0.00	0.00	17.60	1.00
14	CALLAND	531.25	30.00	89.00	0.00	0.00	0.00	0.00	21.15	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROE=.05 ** - PROE=.01)										
YIELD	KG/HA	1.00	0.32+	0.09	0.00	0.00	0.00	0.00	0.21	0.00
DAYS TO FLOWER		0.32+	1.00	0.42++	0.00	0.00	0.00	0.00	0.65++	0.00
DAYS TO MATURITY		0.09	0.42++	1.00	0.00	0.00	0.00	0.00	0.63++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.21	0.65++	0.63++	0.00	0.00	0.00	0.00	1.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS HARVEST		0.45++	0.30+	0.09	0.00	0.00	0.00	0.00	0.16	0.00
PODS PER PLANT		0.73++	0.41++	0.21	0.00	0.00	0.00	0.00	0.46++	0.00
100 SEED WEIGHT		-0.11	-0.21	0.28+	0.00	0.00	0.00	0.00	-0.04	0.00
QUALITY OF SEED		-0.13	-0.12	0.11	0.00	0.00	0.00	0.00	-0.03	0.00

TABLE 69 EXPERIMENT 461 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	FORREST	1.00	188.75	14.50	13.90	1.00
3	HARDEF	1.00	182.50	15.50	13.78	1.00
7	DAVIS	1.00	195.25	12.00	15.93	2.00
15	SEMMES	1.00	175.25	12.50	15.40	2.00
5	COLE	1.00	191.25	13.75	14.45	2.00
1	JUPITER	1.00	176.00	14.75	17.78	2.00
13	WILLIAMS	1.00	179.50	10.25	18.58	2.00
6	BOSSIER	1.00	185.75	10.25	14.33	1.00
2	HAMPTON 266A	1.00	179.50	11.50	15.03	2.00
11	CLARK 63	1.00	169.75	9.75	16.65	2.00
4	IMPROVED PELICAN	1.00	185.75	13.00	17.85	2.00
12	WOODWORTH	1.00	157.75	8.75	18.10	5.00
10	COLUMBUS	1.00	150.75	9.75	14.93	1.00
8	TRACY	1.00	172.00	8.00	16.45	1.00
14	CALLAND	1.00	162.50	7.75	16.68	1.00
GRAND MEAN						
1.00						
176.82						
11.47						
15.52						
1.80						
STANDARD ERROR OF A VARIETY MEAN						
0.00						
8.93						
1.10						
COEFFICIENT OF VARIATION						
0.00%						
10.10%						
7.41%						
0.00						
3.14						
1.64						
0.00						
5% ISI VARIETY MEANS (*****=NS)						
C O C K E L A T I O N S						
(* - PROB=.05 ** - PROB=.01)						
YIELD	KG/HA	0.00	0.45++	0.73++	-0.11	-0.13
DAYS TO	FLOWER	0.00	0.33+	0.41++	-0.21	-0.12
DAYS TO	MATURITY	0.00	0.09	0.21	0.28+	0.11
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
LOADING		0.00	0.16	0.46++	-0.04	-0.03
SHATTER		0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	1.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	1.00	0.38++	-0.23	-0.12
100 SEED	WEIGHT	0.00	0.38++	1.00	-0.36++	-0.11
QUALITY	OF SEED	0.00	-0.23	-0.36++	1.00	0.34++
		0.00	-0.12	-0.11	0.34++	1.00

TABLE 70 EXPERIMENT 474 YEAR 1975

REGION - AFRICA  
 SITE - DEKOKAHA  
 LATITUDE - 10 DEG. N  
 CCOFFRATOFS - A.D. ASSA, R. DIALLC  
 DATE PLANTED - JULY 31, 1975  
 SOIL TYPE - SILT

COUNTRY - IVORY COAST  
 ELEVATION - 300 M  
 LONGITUDE - 5 DEG. 30 MIN. W  
 DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	IOIGING
10	COLUMBUS	950.00	33.00	88.00	0.00	0.00	0.00	0.00	24.90	1.00
11	CLARK 63	914.58	33.00	84.00	0.00	0.00	0.00	0.00	24.73	1.00
5	FORREST	891.67	39.00	90.00	0.00	0.00	0.00	0.00	17.80	1.00
3	HARDEE	862.50	33.00	88.00	0.00	0.00	0.00	0.00	18.95	1.00
15	SEMMES	835.42	33.00	87.00	0.00	0.00	0.00	0.00	11.73	1.00
7	DAVIS	802.08	37.00	90.00	0.00	0.00	0.00	0.00	17.43	1.00
5	CCBB	743.75	33.00	87.00	0.00	0.00	0.00	0.00	16.03	1.00
1	JUPITER	679.17	41.00	100.00	0.00	0.00	0.00	0.00	30.60	1.00
12	WODWORTH	677.08	30.00	83.00	0.00	0.00	0.00	0.00	18.35	1.00
13	WILLIAMS	666.67	33.00	88.00	0.00	0.00	0.00	0.00	18.80	1.00
8	TRACY	656.25	33.00	84.00	0.00	0.00	0.00	0.00	15.85	1.00
2	HAMPTON 266A	635.42	33.00	88.00	0.00	0.00	0.00	0.00	14.18	1.00
14	CALLANE	587.50	33.00	88.00	0.00	0.00	0.00	0.00	21.33	1.00
6	BOSSIER	581.25	33.00	88.00	0.00	0.00	0.00	0.00	13.80	1.00
4	IMPROVEL PELICAN	570.83	37.00	89.00	0.00	0.00	0.00	0.00	29.83	1.00
	GRAND MEAN	736.94	34.27	88.13	0.00	0.00	0.00	0.00	19.62	1.00
	STANDARD ERROR OF A VARIETY MEAN	111.10	0.00	0.00	0.00	0.00	0.00	0.00	2.41	0.00
	COEFFICIENT OF VARIATION	30.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.62%	0.00%
	5% ISI VARIETY MEANS (*****=NS)	*****	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00
C O R R E L A T I O N S										
	YIELD	1.00	0.02	-0.04	0.00	0.00	0.00	0.00	0.36++	0.00
	DAYS TO	0.02	1.00	0.84++	0.00	0.00	0.00	0.00	0.38++	0.00
	DAYS TO	-0.04	0.84++	1.00	0.00	0.00	0.00	0.00	0.37++	0.00
	NODULE	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	NODULE	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
	NODULE	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	NODULE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
	PLANT	0.36++	0.38++	0.37++	0.00	0.00	0.00	0.00	1.00	0.00
	ICDGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HARVEST	0.63++	0.15	0.02	0.00	0.00	0.00	0.00	0.00	0.00
	PLANTS	0.39++	0.30+	0.27+	0.00	0.00	0.00	0.00	0.28+	0.00
	PODS PER	0.02	-0.52++	-0.32+	0.00	0.00	0.00	0.00	0.45++	0.00
	100 SEED	-0.03	0.32+	0.52++	0.00	0.00	0.00	0.00	-0.19	0.00
	QUALITY OF SEED	-0.03	0.32+	0.52++	0.00	0.00	0.00	0.00	0.08	0.00

TABLE 70 EXPERIMENT 474 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
10	COLUMBUS	1.00	138.00	11.75	19.48	1.00
11	CLARK 63	1.00	121.50	10.50	16.33	1.00
9	PERRETT	1.00	144.25	13.00	14.13	1.00
3	HARDEE	1.00	126.25	13.75	16.25	2.00
15	SEMMES	1.00	135.50	10.50	15.48	1.00
7	DAVIS	1.00	142.25	11.50	18.03	3.00
5	COBB	1.00	132.00	12.75	17.18	2.00
1	JUPITER	1.00	116.25	12.75	15.73	3.00
12	WCDWCETH	1.00	117.50	8.75	19.83	2.00
13	WILLIAMS	1.00	104.25	11.50	18.50	2.00
8	TRACY	1.00	121.50	9.25	19.98	1.00
2	HAMPTON 266A	1.00	126.00	10.00	16.73	2.00
14	CALLAND	1.00	128.75	10.25	21.00	1.00
6	BOSSIER	1.00	122.00	9.25	15.20	1.00
4	IMPROVED PELICAN	1.00	138.25	13.50	10.58	1.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	127.62	11.27	16.96	1.60
COEFFICIENT OF VARIATION		0.00	10.48	1.48	0.15	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	16.42% *****	26.26% *****	1.78% *****	0.00% *****
C O R R E L A T I O N S (+ - PROB=.05 + + - PROB=.01)						
YIELD	KG/HA	0.00	0.63++	0.39++	0.02	-0.03
DAYS TO FLOWER		0.00	0.15	0.30+	-0.52++	0.32+
DAYS TO MATURITY		0.00	0.02	0.27+	-0.52+	0.52++
NCDULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NCDULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.28+	0.45++	-0.19	0.08
LCDGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.20	-0.15	-0.11
PODS PER PLANT		0.00	0.20	1.00	-0.28+	0.12
100 SEED WEIGHT		0.00	-0.15	-0.28+	1.00	0.12
QUALITY CP SEED		0.00	-0.11	0.12	0.12	1.00



TABLE 71 EXPERIMENT 364

YEAR 1975

REGION - AFRICA  
SITE - GAGHCA  
LATITUDE - 6 DEG. N  
COOPERATORS - A.D. ASSA, S. TIDIANE  
DATE PLANTED - AUGUST 1, 1975  
SOIL TYPE - SILT

COUNTRY - IVORY COAST  
ELEVATION - 250 M  
LONGITUDE - 6 DEG. W  
DATE HARVESTED - OCTOBER, 1975

INTY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NOVULE NUMBER 1	NOVULE NUMBER 2	NOVULE WEIGHT 1	NOVULE WEIGHT 2	PLANT HEIGHT	ICIGING
6	BOSSIER	992.25	33.75	101.00	2.50	5.75	0.18	0.23	26.65	1.00
1	JUPIER	969.00	32.00	108.00	5.50	13.50	0.20	0.20	39.53	1.00
10	COLUMBUS	948.25	28.00	90.00	1.00	13.50	0.03	0.28	27.15	1.00
4	IMPROVED PELICAN	877.50	35.00	93.00	3.00	2.00	0.10	0.13	34.23	1.00
9	FORREST	788.50	29.50	97.00	1.00	5.25	0.13	0.15	27.40	1.00
2	HAMPTON 286A	687.50	29.50	102.00	1.75	5.25	0.03	0.15	22.23	1.00
5	CCBB	672.00	29.00	102.00	2.75	10.00	0.13	0.18	22.23	1.00
3	HARDEE	636.00	34.25	103.75	0.00	0.50	0.00	0.03	19.58	1.00
14	CAILAND	633.25	28.00	97.00	2.00	5.25	0.08	0.18	25.55	1.00
11	CLARK 63	603.50	28.00	97.00	0.00	1.75	0.00	0.13	22.93	1.00
7	DAVIS	574.75	30.75	101.00	2.75	4.75	0.15	0.18	20.53	1.00
13	WILLIAMS	569.50	28.00	97.00	2.50	6.75	0.13	0.15	23.30	1.00
15	SEMPES	550.25	30.50	101.00	1.00	3.75	0.08	0.20	19.10	1.00
6	TPACY	545.00	28.00	82.00	1.25	4.25	0.08	0.20	20.10	1.00
12	WOODWORTH	366.75	28.00	82.00	0.50	2.25	0.03	0.10	20.70	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROE=.05 ** - FECE=.01)										
YIELD	KG/HA	1.00	0.28+	0.17	0.20	0.22	0.21	0.17	0.66++	0.00
DAYS TO FLOWER		0.28+	1.00	0.37++	0.22	-0.13	0.19	-0.14	0.33+	0.00
DAYS TO MATURITY		0.17	0.37++	1.00	0.21	0.17	0.21	-0.02	0.15	0.00
NOVULE NUMBER 1		0.20	0.22	0.21	1.00	0.45++	0.86++	0.40++	0.34++	0.00
NOVULE NUMBER 2		0.22	-0.13	0.17	0.45++	1.00	0.33++	0.58++	0.29+	0.00
NOVULE WEIGHT 1		0.21	0.19	0.21	0.86++	0.33++	1.00	0.41++	0.22	0.00
NOVULE WEIGHT 2		0.17	-0.14	-0.12	0.40++	0.58++	0.41++	1.00	0.17	0.00
PLANT HEIGHT		0.66++	0.33+	0.15	0.34++	0.29+	0.22	0.17	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		-0.18	-0.27+	-0.20	0.16	0.10	0.06	-0.04	0.08	0.00
PLANTS HARVEST		-0.10	-0.27+	-0.27+	0.03	-0.26+	-0.01	0.01	-0.03	0.00
POLES PER PLANT		0.78++	0.46++	0.26+	0.04	0.11	0.01	0.07	0.52++	0.00
100 SEED WEIGHT		0.07	-0.53++	0.02	-0.21	0.03	-0.25	0.06	-0.11	0.00
QUALITY OF SEED		-0.29+	-0.70++	-0.46++	-0.17	0.02	-0.08	0.13	-0.40++	0.00

TABLE 71 EXPERIMENT 364 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	BCSSIR	2.00	168.75	16.25	16.25	2.00
1	JUPITER	3.75	174.75	16.50	16.25	1.00
10	COLUMBUS	2.25	194.00	14.25	20.00	3.00
4	IMPROVED PELICAN	2.75	211.25	14.25	14.25	1.50
5	FORREST	2.00	175.75	11.50	18.50	2.50
2	HAPPTON 266A	1.75	193.50	14.00	21.25	2.25
3	COBB	4.00	180.00	13.00	19.00	3.00
14	HARDEF	2.00	167.25	18.00	16.25	1.50
11	CALLAND	4.00	195.00	7.50	25.50	3.00
7	CLARK 63	2.25	164.50	8.50	20.00	3.00
13	DAVIS	2.50	188.75	10.25	18.00	2.00
15	WILLIAMS	3.00	161.25	9.00	18.00	3.75
8	SEMES	2.75	209.25	10.00	17.00	2.75
12	TRACY	3.50	215.00	8.00	17.75	3.25
	WOODWORTH	3.75	190.25	7.00	17.25	3.50
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		2.82	185.95	12.00	18.35	2.53
COEFFICIENT OF VARIATION		0.22	15.42	2.61	0.89	0.27
5% ISI VARIETY MEANS (*****=NS)		15.75% 0.63	16.59% *****	43.48% 7.45	9.74% 2.55	21.27% 0.77
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	-0.18	-0.10	0.78++	0.07	-0.29+
DAYS TO FLOWER		-0.27+	-0.06	0.46++	-0.53++	-0.70++
DAYS TO MATURITY		-0.20	-0.27+	0.26+	0.02	-0.46++
NODULE NUMBER 1		0.16	0.03	0.04	-0.21	-0.17
NODULE NUMBER 2		0.10	-0.26+	0.11	0.03	0.32
NODULE WEIGHT 1		0.06	-0.01	0.01	-0.25	-0.08
NODULE WEIGHT 2		-0.04	0.01	0.07	0.06	0.13
PLANT HEIGHT		0.08	-0.03	0.52++	-0.11	-0.40++
LCDCING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.16	-0.24	0.14	0.21
HARVEST		0.16	1.00	-0.23	-0.02	-0.05
PODS PER PLANT		-0.24	-0.23	1.00	-0.09	-0.41++
100 SEED WEIGHT		0.14	-0.02	-0.09	1.00	0.28+
QUALITY OF SEED		0.21	-0.05	-0.41++	0.28+	1.00

TABLE 72

EXPERIMENT 462

YEAR 1975

REGION - AFRICA  
 SITE - ODIENNE  
 LATITUDE - 9 DEG. 3) MIN. N  
 COORDINATES - A.D. ASSA, E. LIALIC  
 DATE PLANTED - AUGUST 3, 1975  
 SOIL TYPE - SILT

COUNTRY - IVORY COAST  
 ELEVATION - 400 M  
 LONGITUDE - 7 DEG. 2) MIN. W  
 DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO Maturity	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LOISING
1	JUPITER	358.33	32.00	110.00	0.00	0.00	0.00	0.00	33.05	1.00
5	FORREST	337.50	26.00	90.00	0.00	0.00	0.00	0.00	22.20	1.00
2	HAMPTON 266A	329.17	26.00	104.00	0.00	0.00	0.00	0.00	17.93	1.00
4	IMPROVED PELICAN	289.58	26.00	90.00	0.00	0.00	0.00	0.00	25.20	1.00
6	BOSSIER	264.58	26.00	90.00	0.00	0.00	0.00	0.00	16.00	1.00
13	WILLIAMS	254.17	25.00	90.00	0.00	0.00	0.00	0.00	21.25	1.00
7	DAVIS	245.83	26.00	104.00	0.00	0.00	0.00	0.00	17.63	1.00
10	COLUMBUS	214.83	25.00	90.00	0.00	0.00	0.00	0.00	19.53	1.00
9	CEEB	214.58	26.00	104.00	0.00	0.00	0.00	0.00	17.68	1.00
3	HARDEE	202.08	26.00	104.00	0.00	0.00	0.00	0.00	19.38	1.00
15	SEMMES	189.58	26.00	90.00	0.00	0.00	0.00	0.00	20.30	1.00
11	CLARK 63	183.33	32.00	104.00	0.00	0.00	0.00	0.00	19.98	1.00
8	TRACY	172.91	25.00	90.00	0.00	0.00	0.00	0.00	18.85	1.00
14	CALLAND	156.25	25.00	90.00	0.00	0.00	0.00	0.00	18.38	1.00
12	WCCDORTH	112.50	25.00	86.00	0.00	0.00	0.00	0.00	18.08	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
CORRELATIONS										
(+ - PRCE=.15      +- PRCE=.01)										
YIELD	KG/HA	1.00	0.23	0.28+	0.00	0.00	0.00	0.00	0.43++	0.00
DAYS TO FLOWER	0.23	0.28+	1.00	0.65++	0.00	0.00	0.00	0.00	0.55++	0.00
DAYS TO MATURITY	0.65++	0.65++	0.28+	1.00	0.00	0.00	0.00	0.00	0.26+	0.00
MODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
MODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
MODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
MODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.43++	0.43++	0.26+	0.26+	0.00	0.00	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.45++	0.45++	0.10	0.33++	0.00	0.00	0.00	0.00	0.21	0.00
POIS PER PLANT	0.58++	0.58++	0.12	0.08	0.00	0.00	0.00	0.00	0.39++	0.00
100 SEED WEIGHT	-0.02	0.19	0.45++	0.45++	0.00	0.00	0.00	0.00	-0.01	0.00
QUALITY OF SEED	0.02	0.44++	0.38++	0.38++	0.00	0.00	0.00	0.00	-0.00	0.00

TABLE 72 EXPERIMENT 462 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	165.25	9.00	16.45	2.00
2	FORREST	1.00	151.50	9.00	13.08	1.00
3	HAMPTON 266A	1.00	156.50	8.75	16.43	4.00
4	IMPROVED PELICAN	1.00	160.50	9.00	10.58	2.00
5	BCSSIER	1.00	139.00	7.75	13.90	1.00
6	WILLIAMS	1.00	138.00	8.50	16.55	2.00
7	DAVIS	1.00	175.25	4.50	15.68	2.00
8	COLUMBUS	1.00	134.00	6.00	14.73	1.00
9	CCBB	1.00	146.50	6.00	15.38	2.00
10	HARDEE	1.00	148.75	8.50	14.58	1.00
11	SEMMES	1.00	153.50	6.50	13.85	2.00
12	CLARK 63	1.00	133.25	6.00	14.93	4.00
13	TRACY	1.00	155.75	6.75	14.28	1.00
14	CALLAND	1.00	137.25	4.25	15.98	1.00
15	WCCDWORTH	1.00	129.75	5.50	12.53	3.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	148.32	7.07	14.59	1.93
COEFFICIENT OF VARIATION		0.00	6.33	1.04	0.66	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	8.54%	29.54%	9.08%	0.00%
C C R R E L A T I O N S (+ - PROB=.01)						
YIELD	KG/HA	0.00	0.45++	0.56++	-0.02	0.02
DAYS TO FLOWER		0.00	0.10	0.12	0.19	0.44++
DAYS TO MATURITY		0.00	0.33++	0.08	0.45++	0.38++
NCDULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NCDULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
LOGGING		0.00	0.21	0.39++	-0.01	-0.00
SHATTER		0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	0.00	0.00	0.00	0.00
POTS PER PLANT		0.00	1.00	0.22	-0.05	-0.01
100 SEED WEIGHT		0.00	-0.03	-0.10	-0.10	-0.01
QUALITY OF SEED		0.00	-0.03	-0.01	0.11	1.00



TABLE 73 EXPERIMENT 460 YEAR 1975

REGION - AFRICA  
 SITE - SIRASSO  
 LATITUDE - 9 DEG. 30 MIN. N  
 COOPERATORS - A.D. ASSA, R. LIALIC  
 DATE PLANTED - JULY 22, 1975  
 SCIL TYPE - SAND

COUNTRY - IVORY COAST  
 ELEVATION - 300 M  
 LONGITUDE - 5 DEG. 45 MIN. W  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
1	JUPITER	2497.91	46.00	102.00	0.00	0.00	0.00	0.00	0.00	51.03	1.00
7	DAVIS	1620.83	37.00	92.00	0.00	0.00	0.00	0.00	0.00	24.05	1.00
9	FORREST	1335.42	39.00	94.00	0.00	0.00	0.00	0.00	0.00	27.18	1.00
2	HAMPTON 266A	1137.50	36.00	89.00	0.00	0.00	0.00	0.00	0.00	20.70	1.00
4	IMPROVED PELICAN	1116.67	36.00	89.00	0.00	0.00	0.00	0.00	0.00	41.38	1.00
15	SEMMES	1097.92	36.00	85.00	0.00	0.00	0.00	0.00	0.00	21.98	1.00
3	HARDEE	1068.75	33.00	89.00	0.00	0.00	0.00	0.00	0.00	23.18	1.00
6	BOSSIER	935.42	33.00	88.00	0.00	0.00	0.00	0.00	0.00	21.08	1.00
5	CCCB	933.33	33.00	86.00	0.00	0.00	0.00	0.00	0.00	21.63	1.00
10	COLUMBUS	897.92	33.00	87.00	0.00	0.00	0.00	0.00	0.00	26.33	1.00
11	CLARK 63	816.67	33.00	85.00	0.00	0.00	0.00	0.00	0.00	22.88	1.00
13	WILLIAMS	816.67	33.00	89.00	0.00	0.00	0.00	0.00	0.00	23.00	1.00
12	WOODWORTH	802.08	30.25	84.00	0.00	0.00	0.00	0.00	0.00	22.70	1.00
14	CALLAND	785.42	33.00	87.00	0.00	0.00	0.00	0.00	0.00	26.38	1.00
8	TRACY	718.75	33.00	85.00	0.00	0.00	0.00	0.00	0.00	22.08	1.00
GRAND MEAN		1105.42	34.95	88.73	0.00	0.00	0.00	0.00	0.00	26.37	1.00
STANDARD ERROR OF A VARIETY MEAN		107.26	0.06	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.00
COEFFICIENT OF VARIATION		19.41%	0.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.80%	0.00%
5% ISI VARIETY MEANS (*****=NS)		306.13	0.18	0.00	0.00	0.00	0.00	0.00	0.00	3.69	0.00
C O R R E L A T I O N S											
		(+ - PROF=0.05    +- - FRCB=.01)									
YIELD	KG/HA	1.00	0.84++	0.82++	0.00	0.00	0.00	0.00	0.00	0.68++	0.00
DAYS TO FLOWER		0.84++	1.00	0.91++	0.00	0.00	0.00	0.00	0.00	0.72++	0.00
DAYS TO MATURITY		0.82++	0.91++	1.00	0.00	0.00	0.00	0.00	0.00	0.71++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
PLANT HEIGHT		0.68++	0.72++	0.71++	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.38++	0.42++	0.27+	0.00	0.00	0.00	0.00	0.00	0.24	0.00
PODS PER PLANT		0.85++	0.78++	0.78++	0.00	0.00	0.00	0.00	0.00	0.80++	0.00
100 SEED WEIGHT		0.14	0.01	0.07	0.00	0.00	0.00	0.00	0.00	-0.22	0.00
QUALITY OF SEED		0.09	0.01	0.14	0.00	0.00	0.00	0.00	0.00	-0.23	0.00

TABLE 73 EXPERIMENT 460 YEAR 1975 (CONTINUED)

INTY NUMEE	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	191.00	40.25	17.93	2.00
7	DAVIS	1.00	191.50	20.00	17.33	3.00
9	PORREST	1.00	175.75	21.75	15.73	3.00
2	HAMPTON 266A	1.00	178.50	19.50	17.25	2.00
4	IMPROVED PELICAN	1.00	175.25	26.00	10.53	1.00
15	SEMME	1.00	205.75	18.25	15.70	2.00
3	HARDEE	1.00	162.50	21.25	14.35	3.00
6	BOSSIER	1.00	165.00	18.75	16.03	1.00
5	COBB	1.00	175.50	16.75	15.40	2.00
10	COLUMBUS	1.00	183.25	17.50	16.30	1.00
11	CLARK 63	1.00	140.50	14.75	17.58	2.00
13	WILLIAMS	1.00	158.50	16.25	18.53	3.00
12	WOODNORTH	1.00	157.50	17.75	17.80	3.00
14	CAIANC	1.00	170.75	16.50	17.55	2.00
8	TRACY	1.00	174.25	14.00	16.85	2.00
	GRAND MEAN	1.00	173.70	19.95	16.32	2.13
	STANDARD ERROR OF A VARIETY MEAN	0.00	7.84	1.55	0.45	0.00
	COEFFICIENT OF VARIATION	0.00%	9.03%	15.56%	5.48%	0.00%
58	ISI VARIETY MEANS (*****=NS)	0.00	22.38	4.43	1.28	0.00
C C R R E L A T I O N S						
	YIELD KG/HA	0.00	0.38++	0.85++	0.14	0.09
	DAYS TO FLOWER	0.00	0.42++	0.78++	0.01	0.01
	DAYS TO MATURITY	0.00	0.27+	0.78++	0.07	0.14
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00
	PLANT HEIGHT	0.00	0.24	0.80++	-0.22	-0.23
	LDGING	0.00	0.00	0.00	0.00	0.00
	SHATTER	1.00	0.00	0.00	0.00	0.00
	PLANTS HARVEST	0.00	1.00	0.24	-0.05	-0.11
	PODS PER PLANT	0.00	0.24	1.00	-0.08	-0.07
	100 SEED WEIGHT	0.00	-0.05	-0.08	1.00	0.37++
	QUALITY OF SEED	0.00	-0.11	-0.07	0.37++	1.00

++ - PROB=.01)

(+ - PROB=.05

TABLE 74 EXPERIMENT 359

YEAR 1975

REGION - AFRICA  
 SITE - SEGUELA  
 LATITUDE - 8 DEG. N  
 COOPERATES - A.D. ASSA, BOKA  
 DATE PLANTED - AUGUST 14, 1975  
 SOIL TYPE - SILT

COUNTRY - IVORY COAST  
 ELEVATION - 250 M  
 LONGITUDE - 7 DEG. 30 MIN. W  
 DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	PIANT HEIGHT	LCDGING
6	BCSSIER	1583.33	38.00	93.00	0.00	50.00	0.00	2.13	38.83	1.00
4	IMPROVEI PELICAN	1479.16	35.00	90.00	0.00	34.50	0.00	3.30	59.15	1.00
7	DAVIS	1395.83	35.00	88.00	0.00	41.75	0.00	3.44	24.83	1.00
3	HAIDEE	1387.50	35.25	85.75	0.00	17.00	0.00	1.75	24.13	1.00
9	FCRREST	1354.17	31.25	93.25	0.00	23.50	0.00	2.75	28.15	1.00
2	HAMPTON 268A	1333.33	32.00	71.00	0.00	33.50	0.00	2.88	22.88	1.00
15	SEMME	1333.33	31.00	88.00	0.00	24.25	0.00	1.94	20.18	1.00
14	CALLAND	1312.50	29.25	71.00	0.00	32.00	0.00	3.31	40.58	1.00
10	COLUMBUS	1312.50	27.75	71.00	0.00	30.25	0.00	2.50	37.40	1.00
5	COBB	1291.66	31.00	88.00	0.00	16.50	0.00	1.38	29.60	1.00
13	WILLIAMS	1166.66	27.25	71.50	0.00	35.75	0.00	2.50	31.95	1.00
1	JUPIER	1145.83	35.50	95.00	0.00	39.00	0.00	1.88	58.93	1.00
8	TRACY	1104.16	29.00	76.50	0.00	12.50	0.00	2.56	20.93	1.00
11	CLARK 63	1041.92	27.00	70.50	0.00	28.50	0.00	2.48	30.45	1.00
12	WCODWORTH	1000.00	27.00	71.00	0.00	23.25	0.00	3.38	25.30	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROE=.05 ** - ERCB=.01)										
YIELD	KG/HA	1.00	0.53**	0.37**	0.00	0.21	0.00	0.06	0.26*	0.00
DAYS TO FLOWER		0.53**	1.00	0.81**	0.00	0.24	0.00	-0.10	0.33*	0.00
DAYS TO MATURITY		0.37**	0.81**	1.00	0.00	0.11	0.00	-0.26*	0.29*	0.00
NCNULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NCNULE NUMBER 2		0.21	0.24	0.11	0.00	1.00	0.00	0.47**	0.28*	0.00
NCNULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NCNULE WEIGHT 2		0.06	-0.10	-0.26*	0.00	0.47**	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.26*	0.33*	0.29*	0.00	0.28*	0.00	0.02	1.00	0.00
LCDGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIANTS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
POES PER PLANT		0.40**	0.65**	0.53**	0.00	0.15	0.00	-0.08	0.51**	0.00
100 SEED WEIGHT		-0.06	-0.39**	-0.53**	0.00	0.13	0.00	0.20	-0.26*	0.00
QUALITY CF SEED		-0.14	0.06	0.22	0.00	0.16	0.00	-0.21	0.29*	0.00

TABLE 74 EXPERIMENT 359 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	BCSSIER	1.00	0.00	27.55	19.50	2.25
4	IMPROVED PELICAN	1.00	0.00	37.30	15.25	2.25
7	DAVIS	1.00	0.00	23.63	19.25	2.50
3	HARDER	1.00	0.00	21.30	16.75	3.00
5	FORREST	1.00	0.00	25.90	15.75	3.25
2	HAMPTON 266A	1.00	0.00	21.63	20.50	2.25
15	SEWES	1.00	0.00	17.88	19.75	2.25
14	CAILAND	1.00	0.00	20.30	24.00	3.00
10	CGIUMBUS	1.00	0.00	14.40	19.75	2.50
5	COBB	1.00	0.00	20.85	20.00	2.50
13	WILLIAMS	1.00	0.00	18.28	21.13	2.75
1	JUFFIER	1.00	0.00	32.28	17.25	4.00
8	TRACY	1.00	0.00	16.83	22.25	2.50
11	CLARK 63	1.00	0.00	17.35	19.00	3.00
12	WCCDWORTH	1.00	0.00	14.20	20.50	2.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSI VARIETY MEANS (*****=NS)						
C C R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.00	0.40++	-0.06	-0.14
DAYS TO FLOWER		0.00	0.00	0.55++	-0.39++	0.06
DAYS TO MATURITY		0.00	0.00	0.53++	-0.53++	0.22
NCDULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NCDULE NUMBER 2		0.00	0.00	0.15	0.13	0.16
NCDULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 2		0.00	0.00	-0.08	0.20	-0.21
PLANT HEIGHT		0.00	0.00	0.51++	-0.26+	0.29+
LCDGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	1.00	-0.44++	0.11
100 SEED WEIGHT		0.00	0.00	-0.44++	1.00	-0.14
QUALITY CF SEED		0.00	0.00	0.11	-0.14	1.00



TABLE 75 EXPERIMENT 623 YEAR 1975

REGION - AFRICA COUNTRY - LESOTHO  
 SITE - MEJANETALANA ELEVATION - 1550 M  
 LATITUDE - 29 DEG. 21 MIN. S LONGITUDE - 27 DEG. 30 MIN. E  
 COOPERATOR - CHU CHEN KIEN DATE HARVESTED - APRIL, 1976  
 DATE PLANTED - DECEMBER 12, 1975  
 SOIL TYPE - SILTY LOAM, PH 5.6  
 FERTILIZER USED (KG/HA) - N 9.2, P 29.0, K 50.0  
 AMOUNT OF MOISTURE - 822 MM

ENTRY NUMEEF	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICDGING
10	WILLIAMS	3419.85	52.25	125.75	122.75	189.75	0.25	1.06	60.77	1.00
11	CALLAND	3362.59	50.50	132.50	134.25	148.75	0.35	1.34	66.38	1.25
17	COLUMBUS	3216.48	54.50	142.50	103.75	113.75	0.15	0.43	78.05	1.00
5	TRACY	2288.79	78.75	143.00	138.00	182.25	0.54	1.79	66.34	3.25
9	WOODWORTH	2095.42	51.00	115.25	97.75	54.00	0.69	0.16	50.81	1.00
8	CLARK 63	1941.63	50.75	136.25	76.50	135.50	0.39	0.46	52.54	1.00
6	FORREST	1393.20	78.50	159.00	78.75	91.50	0.57	0.83	110.71	4.75
3	BOSSIER	1181.49	78.75	160.25	158.00	92.75	1.03	0.94	96.66	5.00
12	SEMMES	769.74	83.50	160.50	119.50	119.50	0.52	0.79	95.49	5.00
4	DAVIS	738.48	93.00	177.50	120.25	103.00	1.23	1.37	114.03	5.00
1	HAMPTON 266A	354.24	87.75	174.50	130.50	126.00	1.07	1.73	99.66	4.75
2	HARDEE	271.30	107.00	185.50	126.25	97.75	1.90	1.06	98.52	4.75
GRAND MEAN		1750.27	72.19	151.04	116.94	121.21	0.73	1.00	82.50	3.15
STANDARD ERROR OF A VARIETY MEAN		217.63	2.12	1.56	34.64	30.28	0.31	0.38	2.90	0.20
COEFFICIENT OF VARIATION		24.87%	5.88%	2.07%	59.25%	49.96%	84.14%	75.92%	7.03%	13.00%
5% ISI VARIETY MEANS (*****=NS)		626.19	6.10	4.49	*****	*****	0.88	*****	8.34	0.59
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	-0.79**	-0.80**	-0.04	0.27	-0.53**	-0.11	-0.63**	-0.83**
DAYS TO FLOWER		-0.79**	1.00	0.90**	0.10	-0.15	0.56**	0.28	0.78**	0.89**
DAYS TO MATURITY		-0.80**	0.90**	1.00	0.10	-0.14	0.51**	0.24	0.85**	0.86**
NODULE NUMBER 1		-0.04	0.10	0.10	1.00	0.69**	0.53**	0.61**	0.06	0.11
NODULE NUMBER 2		0.27	-0.15	-0.14	0.69**	1.00	0.18	0.69**	-0.21	-0.20
NODULE WEIGHT 1		-0.53**	0.56**	0.51**	0.53**	0.18	1.00	0.56**	0.36	0.44**
NODULE WEIGHT 2		-0.11	0.28	0.24	0.61**	0.69**	0.56**	1.00	0.20	0.24
PLANT HEIGHT		-0.63**	0.78**	0.85**	0.06	-0.21	0.36*	0.21	1.00	0.85**
SHATTER		-0.80**	0.89**	0.86**	0.11	-0.20	0.44**	0.24	0.85**	1.00
PLANTS		0.20	-0.21	-0.15	-0.31*	-0.17	-0.12	-0.18	-0.11	-0.24
PODS PER PLANT		0.37**	-0.06	-0.01	0.08	0.24	-0.25	0.26	0.30*	0.08
100 SEED WEIGHT		0.26	-0.63**	-0.62**	-0.09	0.00	-0.24	-0.25	-0.66**	-0.57**
QUALITY OF SEED		-0.88**	-0.94**	-0.91**	-0.08	0.21	-0.53**	-0.18	-0.79**	-0.91**
		-0.73**	0.68**	0.70**	0.07	-0.31*	0.42**	0.03	0.69**	0.79**

TABLE 75 EXPERIMENT 623 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
10	WILLIAMS	1.00	124.25	48.80	20.80	1.00	42.8	19.2
11	CALLAND	1.00	146.00	57.35	20.94	2.25	42.7	17.8
7	COLUMBUS	1.25	130.25	66.50	17.53	1.25	45.0	15.9
5	TRACY	1.00	106.00	71.27	13.73	1.50	41.5	18.0
9	WOODWORTH	1.70	45.25	97.32	18.17	2.25	43.5	18.0
8	CLARK 63	1.25	51.75	106.08	17.58	1.50	45.3	18.4
6	FORREST	1.00	119.00	55.53	11.67	3.75	43.4	15.2
3	BOSSIER	1.00	96.75	55.98	11.48	4.00	43.5	13.9
12	SENNES	1.00	130.50	45.43	10.57	3.75	44.5	13.8
4	DAVIS	1.00	133.75	45.93	10.17	3.25	43.4	13.2
1	HAMPTON 266A	1.00	91.75	36.45	10.31	3.00	44.6	13.6
2	HARDEE	1.00	44.50	21.00	6.83	4.00	43.8	12.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.04	101.65	58.94	14.14	2.63		
COEFFICIENT OF VARIATION		0.10	8.68	7.49	0.31	0.24		
5% ISI VARIETY MEANS (*****=NS)		19.89%	17.08%	25.41%	4.36%	18.46%		
		*****	24.98	21.55	0.89	0.70		
C O R R E L A T I O N S								
			(+ - PROB=.05			+ + - PROB=.01)		
YIELD	KG/HA	0.20	0.37++	0.26	0.88++	-0.73++		
DAYS TO FLOWER		-0.21	-0.06	-0.63++	-0.94++	0.68++		
DAYS TO MATURITY		-0.15	-0.01	-0.62++	-0.91++	0.70++		
NODULE NUMBER 1		-0.31+	0.08	-0.09	-0.08	0.07		
NODULE NUMBER 2		-0.17	0.24	0.00	0.21	-0.31+		
NODULE WEIGHT 1		-0.12	-0.25	-0.24	-0.53++	0.42++		
NODULE WEIGHT 2		-0.18	0.26	-0.25	-0.18	0.03		
PLANT		-0.11	0.30+	-0.66++	-0.79++	0.69++		
LODGING		-0.24	0.08	-0.57++	-0.91++	0.79++		
SHATTER		1.00	0.06	0.08	0.18	-0.29+		
PLANTS HARVEST		0.08	1.00	-0.37++	0.17	-0.13		
PODS PER PLANT		0.08	-0.37++	1.00	0.50++	-0.40++		
100 SEED WEIGHT		0.18	0.17	0.50++	1.00	-0.74++		
QUALITY OF SEED		-0.29+	-0.13	-0.40++	-0.74++	1.00		

TABLE 76 EXPERIMENT 442 YEAR 1975

REGION - AFRICA COUNTRY - MALI  
 SITE - KOULIKORO ELEVATION - 326 M  
 LATITUDE - 12 DEG. 55 MIN. N LONGITUDE - 7 DEG. 33 MIN. W  
 COOPERATOR - ROUSSEL  
 DATE PLANTED - JULY 11, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - SAND 52.5%, SILT 39.8%, CLAY 7.7%, PH 6.3  
 FERTILIZER USED (KG/HA) - N 7.2, P 18.4, K 30.0  
 AMOUNT CP MOISTURE - 631 MM  
 LOCAL VARIETIES - G 5, G 115

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	PLANT HEIGHT	LODGING
5	COBB	2121.26	28.00	95.00	53.75	150.25	0.54	3.58	34.00	1.00	
10	COLUMBUS	2090.00	30.00	89.00	57.75	255.50	0.38	4.94	43.25	1.00	
9	FORREST	1935.80	29.00	95.00	34.50	234.00	0.26	4.28	30.50	1.00	
13	WILLIAMS	1935.80	28.00	89.00	92.75	314.25	0.50	7.67	44.25	1.00	
15	SEMME	1931.64	30.00	95.00	63.50	211.00	0.44	4.14	23.25	1.00	
2	HAMPTON 266A	1902.46	28.00	89.00	87.50	233.75	0.49	4.40	22.25	1.00	
1	JUPITER	1898.30	44.00	101.00	163.75	283.00	0.34	5.15	67.75	1.00	
7	DAVIS	1869.12	35.25	93.50	80.50	221.50	0.24	5.84	29.00	1.00	
6	BOSSIER	1714.93	28.00	95.00	60.50	149.00	0.32	3.49	22.75	1.00	
11	CLARK 63	1612.82	28.00	89.00	63.25	150.50	0.37	4.21	37.25	1.00	
14	CALLAND	1608.65	28.00	89.00	48.50	198.25	0.41	5.16	41.75	1.00	
8	TRACY	1469.04	28.00	89.00	55.25	145.25	0.44	6.89	29.00	1.00	
12	WOODWORTH	1469.04	28.00	89.00	61.00	125.25	0.42	2.64	39.75	1.00	
3	G 5	1366.94	50.00	95.00	159.75	169.00	0.27	3.25	65.00	3.00	
4	G 115	1039.79	50.00	115.00	180.00	222.00	0.51	4.58	92.00	1.75	
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****=NS)											
C C R R E L A T I O N S											
{+ - PROB=-.05 ++ - PROB=-.01}											
YIELD	KG/HA	1.00	-0.43++	-0.36++	-0.37++	0.24	0.07	0.07	-0.44++	-0.45+	
DAYS TO	FLOWER	-0.43++	1.00	0.76++	0.87++	0.14	-0.13	-0.05	0.84++	0.74+	
DAYS TO	MATURITY	-0.36++	0.76++	1.00	0.66++	0.12	0.04	-0.07	0.74++	0.34+	
NODULE	NUMBER 1	-0.37++	0.87++	0.66++	1.00	0.29+	0.13	0.10	0.78++	0.55+	
NODULE	NUMBER 2	0.24	0.14	0.12	0.29+	1.00	0.18	0.67++	0.18	-0.11	
NODULE	WEIGHT 1	0.07	-0.13	0.04	0.13	0.18	1.00	0.28+	0.07	-0.12	
NODULE	WEIGHT 2	0.07	-0.05	-0.07	0.10	0.67++	0.28+	1.00	0.01	-0.20	
PLANT	HEIGHT	-0.44++	0.84++	0.72++	0.78++	0.18	0.07	0.01	1.00	0.55+	
LODGING		-0.45++	0.74++	0.34++	0.55++	-0.11	-0.12	-0.20	0.55++	1.00	
SHATTER		-0.53++	0.48++	0.72++	0.46++	-0.06	0.14	-0.11	0.64++	0.23	
PLANTS		0.37++	-0.41++	-0.21	-0.26+	0.18	0.13	0.30+	-0.39++	-0.55+	
PODS PER	PLANT	-0.18	0.73++	0.64++	0.60++	0.05	-0.05	-0.22	0.67++	0.56+	
100 SEED	WEIGHT	0.43++	-0.87++	-0.69++	-0.67++	0.01	0.18	0.21	-0.73++	-0.79+	
QUALITY	OF SEED	0.18	-0.26+	0.00	-0.19	0.04	-0.07	-0.10	-0.15	-0.43+	
DISEASE	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE 76 EXPERIMENT 442 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
5	COBB	1.00	150.50	32.70	17.10	2.25	41.8	24.0
10	COLUMBUS	1.00	130.50	22.78	18.08	2.25	44.1	22.0
9	FORREST	1.00	131.50	30.72	15.68	3.50	42.9	21.9
13	WILLIAMS	1.00	140.50	20.27	19.08	1.50	43.8	22.9
15	SEMME	1.00	143.25	23.97	18.30	2.00	44.6	21.3
2	HAMPTON 266A	1.00	139.25	23.38	21.15	2.75	42.0	23.3
1	JUPIITER	1.00	132.25	51.35	14.80	3.25	43.8	21.3
7	DAVIS	1.00	145.50	18.78	17.23	1.25	41.9	23.0
6	BOSSIER	1.00	113.25	25.40	17.60	2.50	44.0	21.8
11	CLARK 63	1.75	115.00	21.28	19.25	2.75	43.0	22.4
14	CALLAND	1.00	130.50	18.20	19.58	2.75	43.0	20.9
8	TRACY	1.00	150.25	18.27	19.45	2.25	44.1	20.1
12	WOODWORTH	1.00	122.50	22.50	18.70	2.00	41.3	23.5
3	G 5	1.00	88.50	48.52	7.92	1.00	44.8	16.7
4	G 115	3.00	111.50	47.57	9.72	2.00	47.2	16.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	-0.53++	0.37++	-0.18	0.43++	0.18	0.00	0.00
DAYS TO FLOWER		0.48++	-0.41++	0.73++	-0.87++	-0.26+	0.00	0.00
DAYS TO MATURITY		0.72++	-0.21	0.64++	-0.69++	0.00	0.00	0.00
NODULE NUMBER 1		0.46++	-0.26+	0.60++	-0.67++	-0.19	0.00	0.00
NODULE NUMBER 2		-0.06	0.18	0.05	0.01	0.04	0.00	0.00
NODULE WEIGHT 1		0.14	0.13	-0.05	0.18	-0.07	0.00	0.00
NODULE WEIGHT 2		-0.11	0.30+	-0.22	0.21	-0.10	0.00	0.00
PLANT HEIGHT		0.64++	-0.39++	0.67++	-0.73++	-0.15	0.00	0.00
LOGGING		0.23	-0.55++	0.56++	-0.79++	-0.43++	0.00	0.00
SHATTER		1.00	-0.29+	0.33++	-0.42++	0.00	0.00	0.00
PLANTS HARVEST		-0.29+	1.00	-0.39++	0.50++	0.04	0.00	0.00
PODS PER PLANT		0.33++	-0.39++	1.00	-0.66++	0.01	0.00	0.00
100 SEED WEIGHT		-0.42++	0.50++	-0.66++	1.00	0.28+	0.00	0.00
QUALITY OF SEED		0.00	0.04	0.01	0.28+	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00								

TABLE 77 EXPERIMENT 456 YEAR 1975

REGION - AFRICA COUNTRY - MALI  
 SITE - SIKASSO  
 LATITUDE - 11 DEG. 15 MIN. N LONGITUDE - 5 DEG. 35 MIN. W  
 COOPERATOR - I.R.A.T.  
 DATE PLANTED - JULY 9, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - SAND 55%, SILT 42%, CLAY 13%, PH 5.5  
 FERTILIZER USED (KG/HA) - N 10.8, P 12.0, K 50.0  
 AMOUNT OF MOISTURE - 948 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2210.86	37.00	107.00	0.00	0.00	0.00	0.00	90.25	0.00
7	DAVIS	1648.25	37.00	98.00	0.00	0.00	0.00	0.00	44.25	0.00
9	FORREST	1627.41	37.00	92.00	0.00	0.00	0.00	0.00	43.75	0.00
3	HARDER	1583.65	37.00	98.00	0.00	0.00	0.00	0.00	40.00	0.00
12	WOODWORTH	1552.39	30.00	82.00	0.00	0.00	0.00	0.00	55.00	0.00
2	HAMPTON 266A	1541.97	37.00	92.00	0.00	0.00	0.00	0.00	36.75	0.00
6	BOSSIER	1379.44	30.00	85.00	0.00	0.00	0.00	0.00	46.75	0.00
5	COBB	1371.11	37.00	92.00	0.00	0.00	0.00	0.00	44.25	0.00
4	IMPROVED PELICAN	1346.10	37.00	92.00	0.00	0.00	0.00	0.00	77.50	0.00
10	COLUMBUS	1327.35	30.00	85.00	0.00	0.00	0.00	0.00	50.25	0.00
14	CALLAND	1277.34	30.00	82.00	0.00	0.00	0.00	0.00	46.50	0.00
13	WILLIAMS	1250.25	30.00	82.00	0.00	0.00	0.00	0.00	50.50	0.00
15	SEMME	1239.83	37.00	92.00	0.00	0.00	0.00	0.00	25.25	0.00
11	CLARK 63	1218.99	30.00	82.00	0.00	0.00	0.00	0.00	47.25	0.00
8	TRACY	1135.64	30.00	82.00	0.00	0.00	0.00	0.00	39.25	0.00
GRAND MEAN		1447.37	33.73	89.53	0.00	0.00	0.00	0.00	49.17	0.00
STANDARD ERROR OF A VARIETY MEAN		202.20	0.00	0.00	0.00	0.00	0.00	0.00	3.54	0.00
COEFFICIENT OF VARIATION		27.94%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.38%	0.00%
5% LSD VARIETY MEANS (*****=NS)		*****	0.00	0.00	0.00	0.00	0.00	0.00	10.09	0.00
C O R R E L A T I O N S (+ - PROB=.05 + + - PROB=.01)										
YIELD	KG/HA	1.00	0.29+	0.46++	0.00	0.00	0.00	0.00	0.48++	0.00
DAYS TO FLOWER		0.29+	1.00	0.85++	0.00	0.00	0.00	0.00	0.07	0.00
DAYS TO MATURITY		0.46++	0.85++	1.00	0.00	0.00	0.00	0.00	0.34++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.48++	0.07	0.34++	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.29+	0.14	0.13	0.00	0.00	0.00	0.00	0.15	0.00
PODS PER PLANT		0.55++	0.50++	0.59++	0.00	0.00	0.00	0.00	0.48++	0.00
100 SEED WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 77 EXPERIMENT 456 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	0.00	100.00	28.00	0.00	0.00	38.1	24.9
7	DAVIS	0.00	100.00	19.75	0.00	0.00	39.1	23.1
9	FORREST	0.00	100.00	21.50	0.00	0.00	35.5	24.8
3	HARDEE	0.00	100.00	24.25	0.00	0.00	35.8	26.4
12	WOODWORTH	0.00	100.00	14.00	0.00	0.00	35.8	25.8
2	HAMPTON 266A	0.00	100.00	18.00	0.00	0.00	35.5	26.3
6	BOSSIER	0.00	100.00	20.50	0.00	0.00	37.9	24.6
5	COBB	0.00	100.00	18.75	0.00	0.00	35.0	25.3
4	IMPROVED PELICAN	0.00	100.00	27.00	0.00	0.00	40.1	24.2
10	COLUMBUS	0.00	100.00	13.50	0.00	0.00	37.8	24.9
14	CALLAND	0.00	100.00	15.75	0.00	0.00	38.1	23.4
13	WILLIAMS	0.00	100.00	14.50	0.00	0.00	37.3	24.9
15	SENNES	0.00	100.00	16.00	0.00	0.00	36.6	24.4
11	CLARK 63	0.00	100.00	14.00	0.00	0.00	36.4	25.4
8	TRACY	0.00	97.50	13.75	0.00	0.00	37.8	23.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	99.83	18.62	0.00	0.00		
COEFFICIENT OF VARIATION		0.00%	0.65	2.55	0.00	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	1.29%	27.43%	0.00%	0.00%		
			*****	7.29	0.00	0.00		
C O R R E L A T I O N S								
					(+ - PROB=.05	++ - PROB=.01)		
YIELD	KG/HA	0.00	0.29+	0.55++	0.00	0.00	0.00	0.00
DAYS TO FLOWER		0.00	0.14	0.50++	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.13	0.59++	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.15	0.48++	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.17	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.17	1.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 78 EXPERIMENT 488 YEAR 1975

REGION - AFRICA COUNTRY - MAURITIUS  
 SITE - PAMPLEMOUSSES ELEVATION - 70 M  
 LATITUDE - 20 DEG. 6 MIN. S LONGITUDE - 57 DEG. 34 MIN. E  
 COOPERATOR - AGRICULTURAL DIVISION - MINISTRY OF AGRICULTURE  
 SOIL PH 6.2  
 DATE PLANTED - OCTOBER 6, 1975 DATE HARVESTED - DECEMBER, 1975  
 AMOUNT OF MOISTURE - 749 MM  
 NUMBER OF IRRIGATIONS - 20

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NCDULE NUMBER 2	NODULE WEIGHT 1	NCDULE WEIGHT 2	PLANT HEIGHT	ICLGG
10	COLUMBUS	2556.35	33.75	79.50	373.00	0.00	1.79	0.00	49.25	1.00
13	WILLIAMS	2259.20	20.00	89.00	312.00	0.00	1.52	0.00	47.33	1.00
9	FORREST	1898.71	40.00	141.25	346.50	0.00	1.36	0.00	52.62	1.50
1	JUETTER	1781.61	34.75	93.25	307.50	0.00	1.70	0.00	58.68	1.25
15	SEMME	1767.02	40.00	94.75	305.00	0.00	1.53	0.00	54.00	1.25
5	COBB	1728.26	27.25	99.25	312.00	0.00	1.40	0.00	43.92	1.00
2	HAMPTON 266A	1697.01	34.75	104.50	361.75	0.00	1.67	0.00	56.79	1.50
7	DAVIS	1617.82	24.75	90.75	260.75	0.00	1.48	0.00	51.65	1.00
8	TRACY	1498.63	33.75	100.50	375.00	0.00	1.60	0.00	41.82	1.00
12	WOODWORTH	1294.01	37.00	114.00	338.75	0.00	1.62	0.00	58.52	1.75
3	HARDEE	1263.59	37.75	131.25	368.25	0.00	1.52	0.00	53.80	1.50
14	CALLAND	1243.58	39.50	139.00	367.75	0.00	1.69	0.00	62.80	1.75
11	CLARK 63	1152.31	24.75	123.50	363.25	0.00	1.82	0.00	61.48	1.75
4	IMPROVED PELICAN	780.57	33.50	146.25	279.00	0.00	1.68	0.00	71.71	2.25
6	BOSSIER	637.63	41.00	154.25	367.50	0.00	1.42	0.00	64.71	2.75
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
CORRELATIONS										
(* - PROE=.05 ** - PECB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.20	-0.20	-0.73**	-0.07	0.00	0.04	0.00	-0.57**	-0.61**
DAYS TO MATURITY		1.00	1.00	0.43**	0.39**	0.00	-0.08	0.00	0.43**	0.51**
NCDULE NUMBER 1		-0.07	0.39**	1.00	0.19	0.00	-0.13	0.00	0.77**	0.84**
NCDULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.04	0.16
NODULE WEIGHT 1		0.04	-0.08	-0.13	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.27*	0.00	1.00	0.00	0.02	-0.11
PLANT HEIGHT		-0.57**	0.43**	0.77**	0.04	0.00	0.02	0.00	1.00	0.86**
ICLGGING		-0.61**	0.51**	0.84**	0.16	0.00	-0.11	0.00	0.86**	1.00
SHATTER		-0.68**	0.17	0.76**	0.01	0.00	-0.04	0.00	0.62**	0.69**
HARVEST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS PER 100 SEED		-0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WEIGHT		-0.09	0.05	0.29*	0.12	0.00	-0.14	0.00	0.15	0.28*
QUALITY OF SEED		-0.63**	0.20	0.88**	0.19	0.00	-0.00	0.00	0.57**	0.60**

TABLE 78 EXPERIMENT 488 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
10	COLUMBUS	1.00	0.00	3.33	17.34	2.33	43.8	23.4
13	WILLIAMS	1.00	0.00	0.00	20.48	3.25	45.2	23.9
5	FORREST	1.25	0.00	0.00	17.06	4.50	42.9	22.4
1	JUPITER	1.33	0.00	0.00	16.33	3.25	46.1	22.6
15	SIMMES	1.00	0.00	0.00	14.83	2.50	45.7	22.1
5	COBB	1.25	3.33	0.00	15.33	2.50	37.0	27.3
2	HAMPTON 266A	1.50	0.00	0.00	18.96	3.00	40.5	27.5
7	DAVIS	1.25	0.00	0.00	17.26	2.75	44.2	24.3
8	TRACY	1.25	0.00	0.00	19.36	3.50	44.8	22.0
12	WOODWORTH	1.25	0.00	0.00	13.89	3.00	41.8	22.5
3	HARDEE	1.50	0.00	3.33	22.37	4.25	43.2	25.6
14	CALLAND	1.75	0.00	0.00	19.34	3.75	43.9	22.6
11	CIARK 63	1.50	0.00	0.00	20.50	3.75	42.8	24.2
4	IMPROVED PELICAN	2.25	0.00	0.00	18.20	4.25	48.3	23.9
6	BOSSIER	2.25	0.00	0.00	20.81	4.25	46.2	24.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****NS)								
C C R E I A T I C N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD KG/HA								
DAYS TO FLOWER								
DAYS TO MATURITY								
NODULE NUMBER 1								
NODULE NUMBER 2								
NODULE WEIGHT 1								
NODULE WEIGHT 2								
PLANT HEIGHT								
LCDGING								
SHATTER								
PLANTS HARVEST								
PODS PER PLANT								
100 SEED WEIGHT								
QUALITY OF SEED								

TABLE 79 EXPERIMENT 390 YEAR 1975

REGION - AFRICA COUNTRY - MAURITIUS  
 SITE - REDUIT ELEVATION - 311 M  
 LATITUDE - 20 DEG. 13 MIN. S LONGITUDE - 57 DEG. 29 MIN. E  
 COOPERATOR - AGRICULTURAL DIVISION - MINISTRY OF AGRICULTURE  
 DATE PLANTED - OCTOBER 2, 1975 DATE HARVESTED - DECEMBER, 1975  
 SOIL PH 5.9  
 FERTILIZER USED (KG/HA) - P 44.0  
 AMOUNT OF MOISTURE - 3285 MM  
 NUMBER OF IRRIGATIONS - 12  
 LOCAL VARIETY - LOCAL

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICLING
5	TRACY	952.27	42.25	118.75	144.25	0.00	0.16	0.00	0.00	0.00	38.28	1.25
6	BOSSIER	543.03	47.50	161.75	155.75	0.00	0.17	0.00	0.00	0.00	38.13	1.00
7	FORREST	538.02	39.00	99.75	127.00	0.00	0.11	0.00	0.00	0.00	27.59	1.00
8	JUPIER	518.85	38.50	93.00	154.00	0.00	0.21	0.00	0.00	0.00	24.49	1.00
9	WOODWORTH	475.09	41.25	92.00	163.50	0.00	0.24	0.00	0.00	0.00	31.78	1.00
10	LOCAL	473.01	43.00	115.00	153.75	0.00	0.22	0.00	0.00	0.00	34.55	1.00
11	HARDEE	472.18	40.50	126.75	143.50	0.00	0.17	0.00	0.00	0.00	28.73	1.00
12	CCUMBUS	470.93	38.00	86.00	202.50	0.00	0.16	0.00	0.00	0.00	22.90	1.00
13	HAMPTON 260A	445.92	40.75	104.25	144.00	0.00	0.24	0.00	0.00	0.00	29.21	1.00
14	WILLIAMS	369.24	42.50	133.00	161.25	0.00	0.20	0.00	0.00	0.00	29.88	1.00
15	DAVIS	355.49	43.75	131.25	154.25	0.00	0.23	0.00	0.00	0.00	38.81	1.00
16	CLARK 63	339.23	43.50	126.75	165.25	0.00	0.21	0.00	0.00	0.00	29.82	1.00
17	IMPROVED PELICAN	284.22	46.50	149.25	185.00	0.00	0.21	0.00	0.00	0.00	44.03	1.50
18	CALLAND	245.47	48.00	163.75	166.00	0.00	0.00	0.00	0.00	0.00	48.43	1.00
19	COBB	192.96	45.00	132.25	179.25	0.00	0.18	0.00	0.00	0.00	36.21	1.25
20	GRAND MEAN	445.06	42.67	122.30	159.95	0.00	0.19	0.00	0.00	0.00	33.52	1.07
21	STANDARD ERROR OF A VARIETY MEAN	150.39	3.24	20.10	21.04	0.00	0.02	0.00	0.00	0.00	5.35	0.16
22	COEFFICIENT OF VARIATION	67.58%	15.21%	32.88%	26.30%	0.00	22.22%	0.00	0.00	0.00	31.90%	30.23%
23	5% ISI VARIETY MEANS (*****NS)	*****	*****	*****	*****	0.00	0.06	0.00	0.00	0.00	*****	*****

(+ - PROE=.05 \*\* - PRCE=.01)

C O R R E L A T I O N S

YIELD	KG/HA	1.00	-0.43++	-0.39++	-0.03	0.00	-0.18	0.00	-0.33++	-0.24
DAYS TO FLOWER	1.00	0.87++	0.87++	0.12	0.00	0.00	0.01	0.00	0.83++	0.43++
DAYS TO MATURITY	-0.39++	0.87++	1.00	0.10	0.00	0.00	0.03	0.00	0.77++	0.29+
NODULE NUMBER 1	-0.03	0.12	0.10	1.00	0.00	0.00	0.13	0.00	-0.00	0.23
NODULE NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	-0.18	0.01	0.03	0.13	0.00	0.00	1.00	0.00	0.03	-0.12
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	-0.33++	0.83++	0.77++	-0.00	0.00	0.00	0.03	0.00	1.00	0.51++
LODGING	-0.24	0.43++	0.29+	0.23	0.00	0.00	-0.12	0.00	0.51++	1.00
SHATTER	-0.22	0.45++	0.41++	-0.08	0.00	0.00	0.03	0.00	0.36++	0.29+
HARVEST	-0.23	0.32+	0.38++	0.04	0.00	0.00	0.25	0.00	0.35++	0.24
POIS PER PLANT	0.16	0.05	0.09	0.15	0.00	0.00	-0.12	0.00	0.09	0.49++
100 SEED WEIGHT	-0.18	0.52++	0.50++	0.06	0.00	0.00	0.04	0.00	0.41++	0.03
QUALITY OF SEED	-0.20	0.48++	0.69++	-0.07	0.00	0.00	-0.02	0.00	0.63++	0.20

TABLE 79 EXPERIMENT 39C YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
8	TRACY	1.50	193.25	14.13	16.87	4.50	44.8	21.2
9	BOSSIER	2.25	180.50	13.50	19.95	4.75	41.5	25.4
9	FCRREST	1.00	199.50	10.20	13.82	3.75	40.4	26.0
11	JUPITER	1.25	166.50	12.38	15.86	3.00	47.0	21.9
12	WOODWORTH	1.50	149.00	13.85	16.66	3.00	41.3	24.3
15	LOCAL	1.50	191.00	10.38	16.31	3.50	47.1	21.6
3	HARDEE	1.00	177.25	15.68	17.91	4.25	46.4	23.5
10	COLUMBUS	1.00	116.25	10.80	15.43	3.00	41.5	25.3
2	HAMPTON 266A	1.00	168.25	10.85	17.28	3.00	42.1	26.4
13	WILLIAMS	1.75	181.50	9.32	19.48	4.25	41.5	23.9
7	DAVIS	1.00	217.00	7.85	21.96	3.50	44.8	22.8
11	CLARK 63	1.50	186.00	11.55	18.96	3.50	--	--
4	IMPROVED PELICAN	1.75	215.75	11.40	18.16	5.00	47.1	24.6
14	CALLAND	1.00	204.00	4.98	21.19	5.00	41.2	21.8
5	COBB	1.50	178.75	10.73	21.46	4.25	41.0	26.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.37	181.03	11.15	18.08	3.88		
COEFFICIENT OF VARIATION		0.33	22.46	2.57	2.01	0.57		
5% ISI VARIETY MEANS (*****=NS)		47.63%	24.81%	46.09%	22.21%	29.33%		
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)								
YIELD	KG/HA	-0.22	-0.23	0.16	-0.18	-0.20		
DAYS TO	FLOWER	0.45++	0.32+	0.05	0.52++	0.48++		
DAYS TO	MATURITY	0.41++	0.38++	0.09	0.50++	0.69++		
NODULE	NUMBER 1	-0.38	0.34	0.15	0.36	-0.07		
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00		
NODULE	WEIGHT 1	0.03	0.25	-0.12	0.04	-0.02		
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	0.36++	0.35++	0.09	0.41++	0.63++		
LOGGING		0.29+	0.24	0.40++	0.33	0.20		
SHATTER		1.00	0.15	0.19	0.11	0.46++		
PLANTS	HARVEST	0.15	1.00	-0.12	0.10	0.41++		
PODS PER	PLANT	0.19	-0.12	1.00	0.03	0.06		
100 SEED	WEIGHT	0.11	0.10	0.03	1.00	0.18		
QUALITY	OF SEED	0.46++	0.41++	0.06	0.18	1.00		



TABLE 80 EXPERIMENT 473 YEAR 1975

REGION - AFRICA COUNTRY - NIGER  
 SITE - GAYA ELEVATION - 172 M  
 LATITUDE - 11 DEG. 59 MIN. N LONGITUDE - 3 DEG. 33 MIN. E  
 COOPERATOR - I.R.A.T.-NIGER  
 DATE PLANTED - JULY 5, 1975 DATE HARVESTED - SEPTEMBER, 1975  
 SOIL TYPE - SAND 85-90%, SILT + CLAY 10-15%, PH 5.8-6.0  
 FERTILIZER USED (KG/HA) - P 20.0, K 25.0  
 AMOUNT OF MOISTURE - 813 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	1925.38	0.00	0.00	0.00	16.75	0.00	0.00	49.05	0.00
3	HARDEE	1775.35	0.00	0.00	0.00	39.50	0.00	0.00	26.30	0.00
15	SEMME	1717.01	0.00	0.00	0.00	23.25	0.00	0.00	17.28	0.00
9	PORREST	1600.32	0.00	0.00	0.00	15.00	0.00	0.00	21.40	0.00
4	IMPROVED PELICAN	1329.43	0.00	0.00	0.00	13.50	0.00	0.00	42.83	0.00
14	CALLAND	1296.09	0.00	0.00	0.00	16.50	0.00	0.00	42.98	0.00
10	COLUMBUS	1279.42	0.00	0.00	0.00	13.75	0.00	0.00	37.90	0.00
5	COBB	1266.92	0.00	0.00	0.00	1.75	0.00	0.00	24.73	0.00
13	WILLIAMS	1241.91	0.00	0.00	0.00	7.50	0.00	0.00	34.10	0.00
7	DAVIS	1233.58	0.00	0.00	0.00	20.50	0.00	0.00	21.83	0.00
6	ROSSIER	1216.91	0.00	0.00	0.00	10.25	0.00	0.00	16.23	0.00
12	WOODWORTH	1200.24	0.00	0.00	0.00	9.25	0.00	0.00	42.78	0.00
11	CLARK 63	1116.89	0.00	0.00	0.00	23.50	0.00	0.00	31.40	0.00
8	TRACY	1079.38	0.00	0.00	0.00	7.50	0.00	0.00	24.43	0.00
2	HAMPTON 266A	754.32	0.00	0.00	0.00	1.00	0.00	0.00	42.90	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.00	0.00	0.00	0.25+	0.00	0.00	0.00	0.00
DAYS TO FLOWER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.25+	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.01	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	0.22	0.00	0.00	0.00	0.00	0.26+	0.00	0.00	0.08	0.00
PODS PER PLANT	0.57++	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.28+	0.00
100 SEED WEIGHT	0.14	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	-0.21	0.00
QUALITY OF SEED	-0.01	0.00	0.00	0.00	0.00	-0.10	0.00	0.00	0.19	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 80 EXPERIMENT 473 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	0.00	108.00	38.28	12.50	3.25	41.9	24.1
3	HARDFE	0.00	105.25	33.65	12.50	2.75	38.7	25.4
15	SEMME	0.00	99.75	31.60	13.75	2.00	41.6	22.8
9	PORREST	0.00	95.00	26.73	14.00	3.75	40.4	23.9
4	IMPROVED PELICAN	0.00	122.50	31.80	12.25	3.00	42.0	23.6
14	CALLAND	0.00	130.75	18.47	13.25	3.75	43.0	22.6
10	COLUMBUS	0.00	99.75	20.30	13.25	2.50	42.0	23.2
5	COBB	0.00	97.25	23.10	13.00	3.00	39.3	24.7
13	WILLIAMS	0.00	91.00	22.17	14.25	2.25	41.1	23.8
7	DAVIS	0.00	121.50	17.70	15.00	2.75	41.2	23.0
6	BOSSIER	0.00	90.50	21.33	13.75	2.75	44.6	22.8
12	WOODWORTH	0.00	108.50	20.33	15.00	2.50	40.3	24.0
11	CLARK 63	0.00	91.75	21.00	13.75	2.00	41.2	23.7
8	TRACY	0.00	86.25	19.60	14.50	2.75	43.9	21.2
2	HAMPTON 266A	0.00	106.50	19.97	12.50	2.75	39.2	24.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	103.62	24.40	13.55	2.78		
COEFFICIENT OF VARIATION		0.00	14.70	4.48	1.19	0.29		
5% LSD VARIETY MEANS (*****=NS)		0.00	28.37%	36.69%	17.53%	21.16%		
		0.00	*****	12.80	*****	0.84		
C O R R E L A T I O N S								
				(+ - PROBS=.05		++ - PROB=.01)		
YIELD	KG/HA	0.00	0.22	0.57++	0.14	-0.01	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.26+	0.13	-0.03	-0.10	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.08	0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.28+	-0.21	0.19	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	-0.26+	-0.26+	-0.06	-0.03	0.00	0.00
100 SEED WEIGHT		0.00	-0.26+	1.00	-0.01	0.11	0.00	0.00
QUALITY OF SEED		0.00	-0.06	-0.01	1.00	0.06	0.00	0.00
DISEASE I		0.00	-0.03	0.11	0.06	1.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 81 EXPERIMENT 469 YEAR 1975

REGION - AFRICA COUNTRY - NIGER  
 SITE - MARADI ELEVATION - 351 M  
 LATITUDE - 13 DEG. 28 MIN. N LONGITUDE - 7 DEG. 7 MIN. E  
 COOPERATOR - I.R.A.T.-NIGER  
 DATE PLANTED - JULY 3, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - CLAY (17%), FINE SILT, PH 6.5  
 FERTILIZER USED (KG/HA) - K 45.0  
 AMOUNT OF MOISTURE - 503 MM  
 NUMBER OF IRRIGATIONS - 8

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	3500.70	0.00	75.00	0.00	0.00	0.00	0.00	35.90	1.00
14	CALLAND	3459.02	0.00	71.00	0.00	0.00	0.00	0.00	58.20	1.50
7	DAVIS	3375.67	0.00	75.00	0.00	0.00	0.00	0.00	37.35	1.25
13	WILLIAMS	3358.84	0.00	71.00	0.00	0.00	0.00	0.00	55.30	1.00
12	WOODWORTH	3167.30	0.00	71.00	0.00	0.00	0.00	0.00	50.10	1.00
5	COBB	3146.46	0.00	80.00	0.00	0.00	0.00	0.00	38.35	1.00
6	BOSSIER	3083.95	0.00	75.00	0.00	0.00	0.00	0.00	32.55	1.00
15	SEMME	3021.44	0.00	75.00	0.00	0.00	0.00	0.00	30.13	1.00
11	CLARK 63	3000.60	0.00	71.00	0.00	0.00	0.00	0.00	47.90	1.00
10	COLUMBUS	2979.76	0.00	71.00	0.00	0.00	0.00	0.00	51.25	1.00
2	HAMPTON 266A	2708.87	0.00	75.00	0.00	0.00	0.00	0.00	33.53	1.00
8	TRACY	2646.36	0.00	71.00	0.00	0.00	0.00	0.00	32.90	1.00
3	HARDEE	2625.52	0.00	82.00	0.00	0.00	0.00	0.00	36.45	1.00
4	IMPROVED PELICAN	2437.99	0.00	80.00	0.00	0.00	0.00	0.00	101.18	2.75
1	JUPITER	1146.06	0.00	85.00	0.00	0.00	0.00	0.00	64.77	1.00
GRAND MEAN										
2910.30										
STANDARD ERROR OF A VARIETY MEAN										
210.27										
COEFFICIENT OF VARIATION										
14.45%										
5% LSD VARIETY MEANS (*****=NS)										
600.98										
C O R R E L A T I O N S										
(+ - PROB=-.05 ++ - PROB=-.01)										
YIELD	KG/HA	1.00	0.00	-0.55++	0.00	0.00	0.00	0.00	-0.25	-0.04
DAYS TO FLOWER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	-0.55++	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.23	0.19
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	-0.25	0.00	0.23	0.00	0.00	0.00	0.00	1.00	0.76++
LODGING	0.04	-0.04	0.00	0.19	0.00	0.00	0.00	0.00	0.76++	1.00
SHATTER	-0.12	0.00	0.00	-0.29+	0.00	0.00	0.00	0.00	-0.14	-0.12
PLANTS	HARVEST	0.19	0.00	-0.00	0.00	0.00	0.00	0.00	0.10	0.15
PODS PER	PLANT	-0.12	0.00	0.51++	0.00	0.00	0.00	0.00	0.22	0.33++
100 SEED	WEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 81 EXPERIMENT 469 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.00	132.75	48.00	0.00	0.00	40.3	21.1
14	CALLAND	1.00	124.50	58.50	0.00	0.00	41.0	21.2
7	DAVIS	1.00	150.00	58.50	0.00	0.00	41.4	21.7
13	WILLIAMS	1.00	127.50	34.25	0.00	0.00	40.7	22.6
12	WOODWORTH	1.75	121.75	40.00	0.00	0.00	39.5	23.0
5	COBB	1.00	120.25	58.50	0.00	0.00	39.0	22.5
6	BOSSIER	1.25	131.25	47.25	0.00	0.00	44.9	19.8
15	SEMES	1.00	154.00	44.25	0.00	0.00	42.3	21.1
11	CLARK 63	1.00	112.75	37.00	0.00	0.00	40.6	22.6
10	COLUMBUS	1.25	124.75	34.75	0.00	0.00	42.4	21.4
2	HAMPTON 266A	1.00	129.00	50.00	0.00	0.00	40.2	21.8
8	TRACY	2.00	125.00	31.75	0.00	0.00	44.6	18.7
3	HARDEE	1.00	117.75	60.50	0.00	0.00	43.5	19.5
4	IMPROVED PELICAN	1.00	151.75	63.25	0.00	0.00	43.4	21.0
1	JUPITER	1.00	114.25	69.75	0.00	0.00	43.8	17.9
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.12	0.19	-0.12	0.00	0.00	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		-0.29+	-0.00	0.51++	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		-0.14	0.10	0.22	0.00	0.00	0.00	0.00
LODGING		-0.12	0.15	0.33++	0.00	0.00	0.00	0.00
SHATTER		1.00	-0.09	-0.19	0.00	0.00	0.00	0.00
PLANTS HARVEST		-0.09	1.00	-0.25+	0.00	0.00	0.00	0.00
PODS PER PLANT		-0.19	-0.25+	1.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 82 EXPERIMENT 451 YEAR 1975

REGION - AFRICA COUNTRY - REUNTON  
 SITE - ST. DENIS ELEVATION - 90 M  
 LATITUDE - 20 DEG. 53 MIN. S LONGITUDE - 55 DEG. 30 MIN. E  
 COOPERATOR - PHILOTEE  
 DATE PLANTED - JUNE 23, 1975 DATE HARVESTED - SEPTEMBER, 1975  
 SOIL TYPE - SAND 14%, SILT 39%, CLAY 20%, PH 5.8  
 FERTILIZER USED (KG/HA) - P 44.0, K 83.0  
 AMOUNT OF MOISTURE - 587 MM  
 NUMBER OF IRRIGATIONS - 9 (425 MM)  
 SUBSTITUTE VARIETY - AMSOY

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPLITER	1989.15	46.00	119.00	343.00	0.00	5.73	0.00	37.25	1.00
7	DAVIS	1669.50	36.00	99.00	234.75	0.00	3.15	0.00	16.75	1.00
3	HARDEE	1403.61	46.00	99.00	338.00	0.00	3.50	0.00	17.25	1.00
14	CALLAND	1267.75	39.00	99.00	202.00	0.00	2.30	0.00	20.25	1.00
6	BOSSIER	1261.09	39.00	84.00	293.75	0.00	2.80	0.00	15.75	1.00
5	COBB	1260.25	39.00	84.00	302.25	0.00	2.53	0.00	17.25	1.00
9	FORREST	1258.58	36.00	92.00	244.25	0.00	2.38	0.00	22.50	1.00
13	WILLIAMS	1240.25	40.00	92.00	312.50	0.00	2.30	0.00	17.25	1.00
2	HAMPTON 266A	1208.16	39.00	99.00	268.00	0.00	2.53	0.00	16.00	1.00
10	COLUMBUS	1174.82	39.00	99.00	170.75	0.00	1.33	0.00	15.00	1.00
4	IMPROVED PELICAN	1141.89	46.00	99.00	208.75	0.00	2.20	0.00	22.00	1.00
15	AMSOY	982.28	39.00	109.00	226.75	0.00	1.25	0.00	14.75	1.00
8	TRACY	956.86	39.00	84.00	270.75	0.00	1.53	0.00	14.25	1.00
11	CLARK 63	923.10	39.00	99.00	123.75	0.00	0.80	0.00	15.00	1.00
12	WOODWORTH	880.59	40.00	78.00	258.00	0.00	1.40	0.00	15.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1241.19	40.13	95.67	253.15	0.00	2.38	0.00	18.42	1.00
COEFFICIENT OF VARIATION		48.90	0.00	0.00	24.42	0.00	0.22	0.00	0.62	0.00
5% LSD VARIETY MEANS (*****=NS)		7.88%	0.00%	0.00%	19.29%	0.00%	18.63%	0.00%	6.76%	0.00%
		139.75	0.00	0.00	69.79	0.00	0.63	0.00	1.78	0.00
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.29+	0.53++	0.43++	0.00	0.86++	0.00	0.72++	0.00
DAYS TO FLOWER		0.29+	1.00	0.40++	0.31+	0.00	0.47++	0.00	0.51++	0.00
DAYS TO MATURITY		0.53++	0.40++	1.00	-0.05	0.00	0.44++	0.00	0.59++	0.00
MODULE NUMBER 1		0.43++	0.31+	-0.05	1.00	0.00	0.64++	0.00	0.31+	0.00
MODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
MODULE WEIGHT 1		0.86++	0.47++	0.44++	0.64++	0.00	1.00	0.00	0.76++	0.00
MODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.72++	0.51++	0.59++	0.31+	0.00	0.76++	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS		0.21	-0.23	-0.03	0.08	0.00	0.11	0.00	0.14	0.00
PODS PER PLANT		0.09	0.38++	0.43++	-0.03	0.00	0.09	0.00	0.35++	0.00
100 SEED WEIGHT		0.52++	-0.05	0.46++	0.21	0.00	0.42++	0.00	0.25+	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 82 EXPERIMENT 451 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	186.00	21.33	23.00	0.00	43.6	20.0
7	DAVIS	1.00	191.00	10.75	23.70	0.00	47.8	17.3
3	HARDEE	1.00	172.25	13.48	22.35	0.00	46.2	17.4
14	CALLAND	1.00	182.25	18.30	24.85	0.00	46.5	17.3
6	BOSSIER	1.00	170.00	9.30	20.75	0.00	48.8	16.6
5	COBB	1.00	178.50	9.75	19.63	0.00	44.9	16.7
9	FORREST	1.00	191.75	8.80	20.40	0.00	44.6	17.8
13	WILLIAMS	1.00	173.25	16.90	23.13	0.00	46.2	17.7
2	HAMPTON 266A	1.00	177.00	8.27	21.68	0.00	48.8	16.1
10	COLUMBUS	1.00	189.50	16.88	20.90	0.00	46.7	18.6
4	IMPROVED PELICAN	1.00	171.75	13.28	18.40	0.00	46.4	18.7
15	ANSOY	1.00	172.75	16.50	22.35	0.00	45.1	19.1
8	TRACY	1.00	182.75	16.68	19.48	0.00	48.6	15.0
11	CLARK 63	1.00	167.50	15.50	18.83	0.00	47.9	17.6
12	WOODWORTH	1.00	188.75	14.98	18.65	0.00	47.4	17.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.21	0.09	0.52++	0.00	0.00	0.00
DAYS TO FLOWER		0.00	-0.23	0.38++	-0.05	0.00	0.00	0.00
DAYS TO MATURITY		0.00	-0.03	0.43++	0.46++	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.08	-0.03	0.21	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.11	0.09	0.42++	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.14	0.35++	0.25+	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.03	0.07	0.00	0.00	0.00
PODS PER PLANT		0.00	0.03	1.00	0.24	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.07	0.24	1.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	1.00	0.00
							0.00	1.00

TABLE 83 EXPERIMENT 452 YEAR 1975

REGION - AFRICA COUNTRY - REUNION  
 SITE - ST. DENIS ELEVATION - 800 M  
 LATITUDE - 20 DEG. 53 MIN. S  
 COOPERATOR - I.R.A.I.-REUNION LONGITUDE - 55 DEG. 30 MIN. E  
 DATE PLANTED - DECEMBER 19, 1975 DATE HARVESTED - MARCH, 1976  
 FERTILIZER USED (KG/HA) - P 43.6, K 83.3  
 AMOUNT OF MOISTURE - 934 MM  
 SUBSTITUTE VARIETY - AMSCY

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PIANT HEIGHT	LOGGING
6	DAVIS	3387.34	0.00	139.50	162.75	153.50	2.80	2.25	76.25	1.50
7	HAMPTON 266A	3245.23	0.00	133.00	214.50	282.50	1.85	3.20	71.25	1.25
8	FORREST	3132.71	0.00	135.00	138.25	213.25	1.50	2.70	75.00	2.50
9	BOSSIER	2986.01	0.00	129.00	158.75	236.25	1.73	3.58	65.00	1.25
10	COLUMBUS	2910.17	0.00	119.00	161.75	261.25	1.60	4.10	60.00	1.00
11	COBB	2855.99	0.00	137.00	136.75	111.00	1.70	1.98	81.25	2.00
12	WILLIAMS	2532.17	0.00	104.25	189.50	293.50	1.50	3.98	45.00	1.00
13	CALLAND	2382.14	0.00	106.00	147.25	243.50	2.05	4.08	43.75	1.00
14	HARDEE	2370.06	0.00	143.50	70.50	62.25	1.15	1.30	85.00	2.50
15	CLARK 63	2201.27	0.00	107.25	158.25	211.75	1.45	3.45	46.25	1.00
16	TRACY	2093.75	0.00	110.00	169.50	199.75	2.05	3.30	53.75	1.50
17	WOODWORTH	1869.96	0.00	98.00	154.00	215.75	1.23	2.80	37.50	3.00
18	IMPROVED PRILCAN	1804.53	0.00	148.00	275.00	390.00	3.55	4.32	97.50	3.00
19	AMSOY	1606.15	0.00	101.00	279.00	376.50	1.08	2.70	36.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - FROE=.05 ++ - FFCB=.01)										
YIELD	KG/HA	1.00	0.00	0.43++	-0.20	-0.14	0.13	0.00	0.34+	-0.03
DAYS TO FLOWER	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.43++	0.00	1.00	0.00	-0.14	-0.21	0.49++	-0.23	0.95++	0.66++
NODULE NUMBER 1	-0.20	0.00	0.00	-0.14	1.00	0.74++	0.49++	0.52++	-0.13	-0.11
NODULE NUMBER 2	-0.14	0.00	0.00	-0.21	0.74++	1.00	0.38++	0.63++	-0.18	-0.19
NODULE WEIGHT 1	0.13	0.00	0.00	0.40++	0.49++	0.38++	1.00	0.43++	0.36++	0.19
NODULE WEIGHT 2	0.00	0.00	0.00	-0.23	0.52++	0.83++	0.43++	1.00	-0.20	-0.31+
PIANT HEIGHT	0.34+	0.00	0.00	0.95++	-0.13	-0.18	0.38++	-0.20	1.00	0.74++
LOGGING	-0.03	0.00	0.00	0.66++	-0.11	-0.19	0.19	-0.31+	0.74++	1.00
SHATTER	-0.14	0.00	0.00	0.17	-0.14	-0.18	-0.07	0.18	0.12	0.25
PIANTS HARVEST	0.20	0.00	0.00	-0.04	-0.25	-0.36++	-0.21	-0.33+	-0.07	-0.03
POIS PER PLANT	0.24	0.00	0.00	0.73++	0.08	0.13	0.49++	0.10	0.79++	0.64++
100 SEED WEIGHT	0.35++	0.00	0.00	-0.32+	0.04	0.06	-0.02	0.18	-0.37++	-0.47++
QUALITY OF SEED	-0.61++	0.00	0.00	-0.67++	0.30+	0.25	-0.11	0.14	-0.61++	-0.34++

TABLE 83

EXPERIMENT 452

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
6	LAVIS	1.00	203.75	29.12	23.65	1.00	44.8	20.0
1	HAMPTON 266A	1.00	201.25	32.20	23.98	1.25	45.4	19.6
8	FOREST	1.00	194.00	35.67	17.55	1.00	43.2	20.2
5	BESSIER	1.00	183.00	31.28	22.93	1.50	46.4	20.6
5	COLUMBUS	1.00	190.75	29.13	22.08	1.75	47.1	20.7
4	COBB	1.00	183.50	36.42	20.88	1.00	43.4	20.0
12	WILLIAMS	1.00	196.50	19.10	25.13	2.00	45.9	22.7
12	CALLAND	1.00	183.00	20.90	24.90	2.50	45.3	20.5
2	HARDIE	1.25	178.00	26.83	18.65	1.00	43.3	19.8
10	CLARK 63	1.00	170.00	24.63	21.50	1.50	44.9	21.1
7	TRACY	1.00	200.50	24.03	19.58	2.25	46.4	17.6
11	WOOLWORTH	1.00	196.75	16.03	19.73	3.25	43.3	23.7
3	IMPROVED PELICAN	1.00	171.00	58.18	16.55	2.00	48.8	18.6
14	ANSOY	1.00	181.50	14.03	21.05	3.00	41.5	25.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.02	188.11	28.39	21.29	1.79		
COEFFICIENT OF VARIATION		0.07	7.56	2.59	0.82	0.22		
5% ISI VARIETY MEANS (*****=NS)		13.13%	8.46%	18.22%	7.65%	24.67%		
		*****	*****	7.40	2.34	0.63		
C O R R E L A T I O N S								
		(* - PROB=.05		** - PROB=.01)				
YIELD	KG/HA	-0.14	0.20	0.24	0.35++	-0.61++		
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00		
DAYS TO MATURITY		0.17	-0.04	0.73++	-0.32+	-0.67++		
NCDULE NUMBER 1		-0.14	-0.25	0.08	0.04	0.39+		
NCDULE NUMBER 2		-0.18	-0.36++	0.13	0.06	0.25		
NCDULE WEIGHT 1		-0.07	-0.21	0.49++	-0.02	-0.11		
NCDULE WEIGHT 2		-0.18	-0.33+	0.10	0.18	0.14		
PLANT	HEIGHT	0.12	-0.07	0.79++	-0.37++	-0.61++		
LCDGING		0.25	-0.03	0.64++	-0.47++	-0.34++		
SHATTER		1.00	0.14	-0.10	-0.21	-0.13		
PLANTS	HARVEST	0.14	1.00	-0.19	0.14	0.13		
PODS PER PLANT		-0.10	-0.19	1.00	-0.40++	-0.42++		
100 SEED WEIGHT		-0.21	0.14	-0.40++	1.00	0.03		
QUALITY OF SEED		-0.13	0.13	-0.42++	0.03	1.00		

TABLE 84 EXPERIMENT 453 YEAR 1975

REGION - AFRICA COUNTRY - REUNION  
 SITE - ST. PIERRE ELEVATION - 125 M  
 LATITUDE - 21 DEG. 20 MIN. S LONGITUDE - 55 DEG. 30 MIN. E  
 COOPERATOR - GUY BEGUE DATE HARVESTED - OCTOBER, 1975  
 DATE PLANTED - JUNE 30, 1975  
 SOIL TYPE - SAND 14%, SILT 26%, CLAY 60%, PH 6.6  
 FERTILIZER USED (KG/HA) - P 44.0, K 83.0  
 AMOUNT OF MOISTURE - 594 MM  
 NUMBER OF IRRIGATIONS - 11 (348 MM)  
 SUBSTITUTE VARIETY - AMSOY

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	2445.91	37.50	104.00	0.00	288.50	0.00	3.43	22.75	0.00
1	JUPITER	2072.08	45.00	125.00	0.00	435.25	0.00	3.88	59.00	0.00
9	FOREST	2058.33	35.00	96.00	0.00	299.75	0.00	3.15	27.00	0.00
3	HARDEE	1838.28	45.00	104.00	0.00	312.50	0.00	4.05	24.25	0.00
13	WILLIAMS	1801.61	39.00	94.00	0.00	380.50	0.00	2.88	25.25	0.00
15	AMSOY	1720.76	39.00	97.00	0.00	423.75	0.00	2.63	23.50	0.00
6	BOSSIER	1428.62	39.00	87.00	0.00	298.75	0.00	2.68	19.00	0.00
11	CLARK 63	1268.17	39.00	104.00	0.00	279.50	0.00	3.13	29.00	0.00
12	WOODWORTH	1241.50	39.00	97.00	0.00	317.75	0.00	2.13	25.50	0.00
8	TRACY	1153.56	39.00	79.00	0.00	298.50	0.00	2.13	17.00	0.00
14	CALLAND	1083.97	39.00	108.00	0.00	213.75	0.00	3.05	31.75	0.00
10	COLUMBUS	977.70	39.00	106.00	0.00	382.25	0.00	3.43	31.75	0.00
2	HAMPTON 266A	948.11	39.00	97.00	0.00	321.00	0.00	2.45	20.50	0.00
4	IMPROVED PELICAN	927.69	45.00	125.00	0.00	270.75	0.00	3.15	38.75	0.00
5	COBB	589.70	38.75	91.00	0.00	334.75	0.00	2.35	21.00	0.00
GRAND MEAN		1437.07	39.82	100.93	0.00	323.82	0.00	2.96	27.73	0.00
STANDARD ERROR OF A VARIETY MEAN		90.91	0.65	0.26	0.00	31.35	0.00	0.22	1.34	0.00
COEFFICIENT OF VARIATION		12.65%	3.28%	0.51%	0.00%	19.36%	0.00%	15.02%	9.68%	0.00%
5% LSD VARIETY MEANS (*****=NS)		259.84	1.87	0.74	0.00	89.60	0.00	0.64	3.84	0.00
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.01	1.00	0.13	0.00	0.29+	0.00	0.49++	0.21	0.00
DAYS TO MATURITY		0.13	0.60++	1.00	0.00	0.11	0.00	0.36++	0.53++	0.00
NODULE NUMBER 1		0.00	0.00	1.00	0.00	0.05	0.00	0.53++	0.84++	0.00
NODULE NUMBER 2		0.29+	0.11	0.05	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.24	0.00
NODULE WEIGHT 2		0.49++	0.36++	0.53++	0.00	0.33++	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.21	0.53++	0.84++	0.00	0.24	0.00	1.00	0.46++	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.46++	1.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST		0.16	-0.11	-0.03	0.00	-0.16	0.00	0.01	-0.13	0.00
PODS PER PLANT		0.66++	0.16	0.37++	0.00	0.03	0.00	0.32+	0.37++	0.00
100 SEED WEIGHT		0.35++	0.29+	0.47++	0.00	0.30+	0.00	0.40++	0.46++	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 84 EXPERIMENT 453 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
7	DAVIS	1.00	193.00	23.80	22.50	0.00	47.8	17.2
1	JUPITER	1.00	175.50	22.70	25.50	0.00	47.8	17.4
9	FORREST	1.00	189.50	19.75	17.75	0.00	45.5	18.3
3	HARDEE	1.00	183.75	20.95	20.75	0.00	48.1	16.8
13	WILLIAMS	1.00	179.00	20.02	20.25	0.00	48.7	17.7
15	AMSOY	1.00	176.75	21.65	20.75	0.00	43.4	19.6
6	BOSSIER	1.00	171.00	16.03	19.00	0.00	48.5	16.8
11	CLARK 63	1.00	176.50	19.00	17.00	0.00	47.5	17.4
12	WOODWORTH	1.00	191.25	17.95	17.50	0.00	46.9	17.5
8	TRACY	1.00	185.00	16.22	13.75	0.00	49.3	15.3
14	CALLAND	1.00	187.25	16.92	20.25	0.00	48.2	17.2
10	COLUMBUS	1.00	180.00	15.95	19.75	0.00	48.8	17.4
2	HAMPTON 266A	1.00	176.50	11.83	20.25	0.00	47.8	17.0
4	IMPROVED PELICAN	1.00	180.25	19.40	17.75	0.00	49.0	17.3
5	COBB	1.00	180.50	8.60	21.50	0.00	47.3	17.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	181.72	18.05	19.62	0.00		
COEFFICIENT OF VARIATION		0.00	5.88	1.36	0.40	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	6.47%	15.01%	4.05%	0.00%		
		0.00	*****	3.87	1.14	0.00		
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.16	0.66++	0.35++	0.00	0.00	0.00
DAYS TO FLOWER		0.00	-0.11	0.16	0.29+	0.00	0.00	0.00
DAYS TO MATURITY		0.00	-0.03	0.37++	0.47++	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	-0.16	0.03	0.30+	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.01	0.32+	0.40++	0.00	0.00	0.00
PLANT HEIGHT		0.00	-0.13	0.37++	0.46++	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.03	-0.07	0.00	0.00	0.00
PODS PER PLANT		0.00	-0.03	1.00	0.16	0.00	0.00	0.00
100 SEED WEIGHT		0.00	-0.07	0.16	1.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 85

EXPERIMENT 635

YEAR 1975

REGION - AFRICA  
 SITE - SALISBURY  
 LATITUDE - 17 DEG. 48 MIN. S  
 COOPERATORS - J.R. TATTERSFIELD, J.S. TICHAGWA  
 DATE PLANTED - DECEMBER 2, 1975  
 SOIL TYPE - SAND 30%, SILT 20%, CLAY 50%, PH 5.6  
 FERTILIZER USED (KG/HA) - N 24.0, P 18.0, K 25.0  
 AMOUNT OF MOISTURE - 88.2 MM  
 NUMBER OF IRRIGATIONS - 3 (77 MM)  
 LOCAL VARIETIES - ORIBI, RHOSA

COUNTRY - RHODESIA  
 ELEVATION - 1506 M  
 LONGITUDE - 31 DEG. 3 MIN. E  
 DATE HARVESTED - MARCH, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
8	COLUMBUS	3547.38	37.00	118.00	276.75	344.50	0.50	1.98	90.25	1.25
1	ORIBI	3516.12	58.00	134.00	147.75	284.25	0.63	2.10	103.50	1.00
7	FORREST	3088.95	55.00	128.00	200.50	319.50	0.97	2.33	95.00	4.50
3	HARDEE	3039.77	76.00	153.00	383.25	536.75	2.33	3.18	100.25	3.75
4	BOSSIER	3032.27	48.00	128.00	219.50	421.25	1.10	3.38	80.75	2.25
5	DAVIS	3016.44	65.00	138.50	384.00	541.00	2.15	3.55	99.25	4.00
12	SEMMES	3003.10	51.00	128.00	294.75	344.75	0.92	1.55	80.50	1.00
2	HAMPTON 266A	2938.09	55.00	140.00	329.75	499.75	1.28	3.03	82.25	2.50
9	WOODWORTH	2846.40	37.00	104.00	174.75	216.00	0.33	1.80	64.25	1.00
11	RHOSA	2765.97	58.00	128.00	225.00	351.00	0.87	2.48	108.75	2.25
6	TRACY	2583.85	44.00	118.00	210.00	454.75	0.70	3.33	66.75	2.50
10	WILLIAMS	2524.25	37.00	111.00	260.25	331.00	0.42	2.13	67.50	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05    ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.14	0.24	-0.03	-0.03	0.05	-0.14	0.41++	-0.05
DAYS TO FLOWER	0.14	1.00	0.93++	0.48++	0.54++	0.84++	0.84++	0.43++	0.72++	0.61++
DAYS TO MATURITY	0.24	0.93++	1.00	0.56++	0.63++	0.83++	0.83++	0.47++	0.66++	0.54++
NODULE NUMBER 1	-0.03	0.48++	0.56++	1.00	0.67++	0.76++	0.76++	0.36+	0.21	0.35+
NODULE NUMBER 2	-0.03	0.54++	0.63++	0.67++	1.00	0.76++	0.76++	0.83++	0.18	0.45++
NODULE WEIGHT 1	0.05	0.84++	0.83++	0.76++	0.76++	1.00	1.00	0.63++	0.45++	0.64++
NODULE WEIGHT 2	-0.14	0.43++	0.47++	0.36+	0.83++	0.63++	0.63++	1.00	0.11	0.50++
PLANT HEIGHT	0.41++	0.72++	0.66++	0.21	0.18	0.45++	0.45++	0.11	1.00	0.41++
LOGGING	-0.05	0.61++	0.54++	0.35+	0.45++	0.64++	0.64++	0.50++	0.41++	1.00
SHATTER	-0.26	0.48++	-0.62++	-0.24	-0.48++	-0.40++	-0.40++	-0.40++	-0.50++	-0.36+
PLANTS PER PLANT	0.09	0.37+	0.50++	0.28	0.40++	0.32+	0.32+	0.24	0.37+	0.27
PODS PER PLANT	0.16	0.80++	0.71++	0.37+	0.31+	0.72++	0.31+	0.31+	0.53++	0.68++
100 SEED WEIGHT	0.16	0.07	0.33+	0.22	0.30+	0.09	0.09	0.18	0.12	-0.19
QUALITY OF SEED	-0.20	-0.27	-0.33+	-0.28	-0.29+	-0.26	-0.26	-0.23	-0.35+	0.20
DISEASE I	-0.17	-0.08	-0.05	-0.26	0.17	-0.06	-0.06	0.38++	-0.22	-0.01
DISEASE II	-0.11	-0.32+	-0.43++	-0.12	-0.33+	-0.30+	-0.30+	-0.32+	-0.28	-0.40++
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 85 EXPERIMENT 635 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
8	COLUMBUS	1.00	197.25	23.58	19.93	1.75	46.2	19.3
1	ORIBI	1.00	199.50	30.73	20.53	1.00	41.5	19.6
7	FORREST	1.00	198.75	39.48	16.90	3.50	40.0	20.5
3	HARDEE	1.00	199.75	47.73	18.58	2.00	44.4	20.7
4	BOSSIER	1.00	198.50	28.05	22.58	2.00	45.6	19.4
5	DAVIS	1.00	200.00	39.18	19.30	1.00	42.7	20.0
12	SEMME	1.00	199.75	25.03	21.23	2.00	45.0	19.7
2	HAMPTON 266A	1.00	199.75	32.03	23.38	2.25	43.6	19.7
9	WOODWORTH	2.00	172.75	28.60	16.40	3.00	43.7	19.8
11	RHOSA	1.00	198.75	27.98	20.20	2.00	40.6	20.4
6	TRACY	1.00	200.00	22.35	18.70	2.25	45.5	16.0
10	WILLIAMS	1.50	199.75	21.00	19.60	2.00	41.1	21.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.13	197.04	30.47	19.77	2.06		
COEFFICIENT OF VARIATION		0.08	2.50	1.60	0.35	0.15		
5% LSD VARIETY MEANS (*****=NS)		14.81%	2.54%	10.47%	3.51%	14.26%		
		0.24	7.18	4.58	1.00	0.42		
C O R R E L A T I O N S								
		(+ - PROB=.05			++ - PROB=.01)			
YIELD	KG/HA	-0.26	0.09	0.16	0.16	-0.20	-0.17	-0.11
DAYS TO FLOWER		-0.48++	0.37+	0.80++	0.07	-0.27	-0.08	-0.32+
DAYS TO MATURITY		-0.62++	0.50++	0.71++	0.33+	-0.33+	-0.05	-0.43++
NODULE NUMBER 1		-0.24	0.28	0.37+	0.22	-0.28	-0.26	-0.12
NODULE NUMBER 2		-0.48++	0.40++	0.31+	0.30+	-0.29+	0.17	-0.33+
NODULE WEIGHT 1		-0.40++	0.32+	0.72++	0.09	-0.26	-0.06	-0.30+
NODULE WEIGHT 2		-0.40++	0.24	0.31+	0.18	-0.23	0.38++	-0.32+
NODULE PLANT		-0.50++	0.37+	0.53++	0.12	-0.35+	-0.22	-0.28
LODGING		-0.36+	0.27	0.68++	-0.19	0.20	-0.01	-0.40++
SHATTER		1.00	-0.68++	-0.18	-0.42++	0.32+	-0.19	0.57++
PLANTS		-0.68++	1.00	0.09	0.43++	-0.33+	0.15	-0.50++
PODS PER PLANT		-0.18	0.09	1.00	-0.22	0.01	-0.20	-0.16
100 SEED WEIGHT		-0.42++	0.43++	-0.22	1.00	-0.42++	0.02	-0.26
QUALITY OF SEED		0.32+	-0.33+	0.01	-0.042++	1.00	-0.19	0.21
DISEASE I		-0.19	0.15	-0.20	0.02	-0.19	1.00	-0.25
DISEASE II		0.57++	-0.50++	-0.16	-0.26	0.21	-0.25	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 86

EXPERIMENT 322

YEAR 1975

REGION - AFRICA  
 SITE - KARIMA  
 LATITUDE - 2 DEG. 17 MIN. S  
 COOPERATOR - INSTITUT DES SCIENCES AGRONOMIQUES - RWANDA  
 DATE PLANTED - OCTOBER 3, 1975  
 SOIL TYPE - SAND 65%, SILT 10%, CLAY 24%, PH 6.0  
 AMOUNT OF MOISTURE - 351 MM  
 LOCAL VARIETY - PALMETTO

COUNTRY - RWANDA

ELEVATION - 1325 M

LONGITUDE - 30 DEG. 16 MIN. E

DATE HARVESTED - JANUARY, 1976

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ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	TRACY	1425.28	35.00	89.50	32.00	49.75	0.00	0.00	20.85	1.00
13	CALLAND	1319.01	35.00	86.25	12.50	24.25	0.00	0.00	32.03	1.00
4	CORR	1139.81	40.00	89.50	6.50	48.00	0.00	0.00	20.98	1.00
11	WOODWORTH	1123.14	35.00	89.50	0.50	38.00	0.00	0.00	30.75	1.00
1	HAMPTON 266A	1100.22	40.00	87.50	43.25	126.75	0.00	0.00	21.48	1.00
12	WILLIAMS	1100.22	35.00	87.50	8.00	18.25	0.00	0.00	23.70	1.00
10	CLARK 63	996.03	35.00	86.25	2.25	15.00	0.00	0.00	31.53	1.00
14	PALMETTO	958.52	43.00	96.50	66.25	179.50	0.00	0.00	47.45	1.00
9	COLUMBUS	952.27	35.00	90.00	0.00	13.25	0.00	0.00	30.13	1.00
2	HARDEE	946.02	42.25	103.00	37.00	168.25	0.00	0.00	32.93	1.00
8	FORREST	908.51	40.00	99.75	2.25	25.25	0.00	0.00	35.93	1.00
6	DAVIS	520.94	44.00	98.50	62.75	140.25	0.00	0.00	33.98	1.00
3	IMPROVED PELICAN	502.18	53.00	103.00	17.75	4.00	0.00	0.00	55.13	1.00
5	BOSSIER	402.16	53.00	98.50	26.00	18.25	0.00	0.00	41.90	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=-.05      +- - PROB=-.01)										
YIELD	KG/HA	1.00	-0.70++	-0.38++	-0.23	-0.08	0.00	0.00	-0.48++	0.00
DAYS TO FLOWER	1.00	-0.70++	1.00	0.56++	0.33+	0.16	0.00	0.00	0.68++	0.00
DAYS TO MATURITY	-0.38++	0.56++	1.00	0.08	0.08	0.16	0.00	0.00	0.52++	0.00
NODULE NUMBER 1	-0.23	0.33+	0.08	1.00	1.00	0.72++	0.00	0.00	0.15	0.00
NODULE NUMBER 2	-0.08	0.14	0.16	0.72++	1.00	0.00	0.00	0.00	0.05	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	-0.48++	0.68++	0.52++	0.15	0.05	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.39++	-0.16	-0.19	-0.07	-0.02	0.00	0.00	-0.14	0.00
PODS PER	PLANT	-0.19	0.01	0.17	-0.07	0.10	0.00	0.00	0.26+	0.00
100 SEED	WEIGHT	0.66++	-0.66++	-0.58++	-0.26	-0.23	0.00	0.00	-0.63++	0.00
QUALITY	OF SEED	-0.69++	0.68++	0.46++	0.31+	0.20	0.00	0.00	0.52++	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 86 EXPERIMENT 322 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	TRACY	1.00	173.25	12.73	15.72	2.00
13	CALLAND	1.00	183.00	15.68	14.49	1.75
4	CORB	1.00	195.75	13.48	11.94	2.50
11	WOODWORTH	1.00	187.00	18.47	10.81	2.25
1	HAMPTON 266A	1.00	182.25	14.03	12.97	2.50
12	WILLIAMS	1.00	170.25	12.48	15.34	1.00
10	CLARK 63	1.00	130.75	22.95	11.16	2.50
14	PALMETTO	1.00	175.25	18.75	9.33	3.00
9	COLUMBUS	1.00	175.00	22.42	10.78	3.00
2	HARDEE	1.00	166.25	24.50	7.46	3.50
8	FORREST	1.00	159.25	18.75	8.71	3.00
6	DAVIS	1.00	140.25	15.00	7.11	4.00
3	IMPROVED PELICAN	1.00	169.25	16.10	6.71	4.25
5	BOSSIER	1.00	156.75	18.25	8.25	3.75
	GRAND MEAN	1.00	168.88	17.40	10.77	2.79
	STANDARD ERROR OF A VARIETY MEAN	0.00	8.89	2.27	0.79	0.29
	COEFFICIENT OF VARIATION	0.00%	10.53%	26.06%	14.70%	20.84%
	5% LSD VARIETY MEANS (*****=NS)	0.00	25.41	6.48	2.26	0.83
C O R R E L A T I O N S						
(+ - PROB=.05      ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.39++	-0.19	0.66++	-0.69++
DAYS TO FLOWER		0.00	-0.16	0.01	-0.66++	0.00
DAYS TO MATURITY		0.00	-0.19	0.17	-0.58++	0.00
NODULE NUMBER 1		0.00	-0.07	-0.07	-0.26	0.31+
NODULE NUMBER 2		0.00	-0.02	0.10	-0.23	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
HEIGHT		0.00	-0.14	0.26+	-0.63++	0.52++
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS		0.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	-0.12	0.31+	-0.33+
PLANT		0.00	-0.12	1.00	-0.35++	0.20
PODS PER		0.00	0.31+	-0.35++	1.00	-0.78++
100 SEED		0.00	-0.33+	0.20	-0.78++	1.00
WEIGHT		0.00	0.00	0.00	0.00	0.00
QUALITY		0.00	0.00	0.00	0.00	0.00
OF SEED		0.00	0.00	0.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00



TABLE 87 EXPERIMENT 321 YEAR 1975

REGION - AFRICA  
 SITE - RUHONA  
 LATITUDE - 2 DEG. 29 MIN. S  
 COOPERATOR - INSTITUT DES SCIENCES AGRONOMIQUES - RWANDA  
 DATE PLANTED - MAY 13, 1975  
 SOIL TYPE - CLAY, PH 4.6-5.3  
 AMOUNT OF MOISTURE - 420 MM  
 LOCAL VARIETY - PALMETTO

COUNTRY - RWANDA  
 ELEVATION - 1650 M  
 LONGITUDE - 29 DEG. 46 MIN. E  
 DATE HARVESTED - AUGUST, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	WEIGHT 1	WEIGHT 2	NODULE HEIGHT	PLANT HEIGHT	LODGING
7	DAVIS	1890.32	72.50	122.00	317.75	134.25	1.07	1.59	47.40	1.25	
16	PALMETTO	1473.72	51.50	135.50	230.75	360.50	0.95	2.70	58.28	2.00	
4	IMPROVED PELICAN	1424.25	72.50	141.00	201.25	169.50	1.09	1.32	81.30	1.50	
10	COLUMBUS	1419.04	37.50	123.50	124.50	235.25	0.31	1.28	42.93	1.00	
6	BOSSIER	1338.33	63.00	136.00	250.00	206.25	0.63	1.00	44.38	1.00	
3	HARDEE	1111.80	70.75	143.75	436.50	310.25	1.94	2.27	47.28	1.00	
5	COBB	911.31	45.00	101.25	141.75	175.50	0.27	0.50	24.60	1.00	
2	HAMPTON 266A	898.29	51.00	117.25	146.00	177.50	0.35	1.03	33.28	1.00	
9	FORREST	794.14	54.00	134.50	132.50	194.00	0.29	1.03	46.83	1.25	
13	WILLIAMS	674.37	35.00	98.50	104.50	119.50	0.25	0.63	28.23	1.00	
12	WOODWORTH	648.33	35.00	101.25	128.25	135.50	0.53	0.77	28.48	1.50	
14	CALLAND	624.90	35.00	105.00	88.25	108.50	0.26	0.86	31.15	1.25	
11	CLARK 63	624.90	35.00	102.25	98.25	111.75	0.20	0.43	27.98	1.00	
15	SEMMES	567.62	45.00	129.00	147.25	191.50	0.34	0.85	25.00	1.00	
8	TRACY	562.41	42.25	98.00	193.25	179.25	0.49	0.89	17.02	1.50	
1	JUPITER	406.18	79.00	173.00	199.25	128.25	1.05	0.87	84.52	3.25	
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
(* - PROB=.05 ** - PROB=.01)											
YIELD	KG/HA	1.00	0.30+	0.25+	0.25+	0.31+	0.33++	0.47++	0.29+	-0.07	
DAYS TO	FLOWER	0.30+	1.00	0.65++	0.53++	0.11	0.60++	0.27+	0.73++	0.41++	
DAYS TO	MATURITY	0.25+	0.65++	1.00	0.40++	0.30+	0.42++	0.36++	0.69++	0.39++	
NODULE	NUMBER 1	0.25+	0.53++	0.40++	1.00	0.54++	0.66++	0.52++	0.27+	0.02	
NODULE	NUMBER 2	0.31+	0.11	0.30+	0.54++	1.00	0.46++	0.77++	0.19	-0.09	
NODULE	WEIGHT 1	0.33++	0.60++	0.42++	0.66++	0.46++	1.00	0.63++	0.54++	0.29+	
NODULE	WEIGHT 2	0.47++	0.27+	0.36++	0.52++	0.77++	0.63++	1.00	0.35++	0.05	
PLANT	HEIGHT	0.29+	0.73++	0.69++	0.27+	0.19	0.54++	0.35++	1.00	0.55++	
LODGING		-0.07	0.41++	0.39++	0.02	-0.09	0.29+	0.05	0.55++	1.00	
SHATTER		-0.25+	-0.29+	-0.16	-0.10	-0.10	-0.00	-0.05	-0.11	0.06	
HARVEST		-0.07	-0.17	-0.05	-0.28+	0.07	-0.14	0.02	-0.05	0.06	
PLANT		0.41++	0.41++	0.29+	0.30+	0.23	0.51++	0.37++	0.36++	0.01	
PODS PER		0.04	0.13	0.24	0.18	0.07	0.20	0.05	0.12	0.03	
100 SEED		-0.20	0.08	0.17	-0.13	-0.14	0.04	-0.05	-0.21	0.31+	
QUALITY		0.04	0.16	0.38++	-0.03	-0.00	0.09	0.09	0.49++	0.27+	
DISEASE	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	



TABLE 87 EXPERIMENT 321 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
7	DAVIS	1.00	80.25	24.28	18.25	2.50	40.6	20.1
16	PALMETTO	2.00	96.75	27.90	13.75	2.25	41.1	19.0
4	IMPROVED PELICAN	1.75	79.00	33.92	11.50	2.50	43.7	18.6
10	COLUMBUS	2.25	92.00	22.30	16.25	2.75	44.0	18.8
6	BOSSIER	1.50	84.25	39.55	15.75	2.25	41.3	19.8
3	HARDEE	1.75	81.00	37.32	17.50	2.25	42.9	18.2
5	CORB	1.75	97.25	26.40	13.50	2.25	--	--
2	HAMPTON 266A	1.50	82.25	25.42	15.25	3.00	42.4	17.2
9	PORREST	1.00	85.25	29.62	16.50	2.25	38.3	19.5
13	WILLIAMS	2.00	93.25	20.90	15.75	2.00	43.9	17.1
12	WOODWORTH	2.25	85.00	22.20	14.50	2.25	42.9	17.9
14	CALAND	2.25	91.25	20.53	16.25	4.00	46.0	16.9
11	CLARK 63	1.75	68.50	18.78	15.50	2.75	43.9	17.7
15	SEMMES	1.75	92.50	18.40	16.75	2.75	45.4	16.3
8	TRACY	2.25	89.75	19.47	13.25	2.50	44.6	14.6
1	JUPITER	2.25	88.50	20.40	16.75	4.00	42.7	17.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.81	86.67	25.46	15.44	2.64		
COEFFICIENT OF VARIATION		0.21	5.36	2.91	0.37	0.30		
5% LSD VARIETY MEANS (*****=NS)		23.08%	12.36%	22.87%	4.82%	22.55%		
		0.60	15.31	8.32	1.06	0.85		
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.25+	-0.07	0.41++	0.04	-0.20	0.04	0.00
DAYS TO FLOWER		-0.29+	-0.17	0.41++	0.13	0.08	0.16	0.00
DAYS TO MATURITY		-0.16	-0.05	0.29+	0.24	0.17	0.38++	0.00
NODULE NUMBER 1		-0.10	-0.28+	0.30+	0.18	-0.13	0.00	0.00
NODULE NUMBER 2		-0.10	0.07	0.23	0.07	-0.14	-0.00	0.00
NODULE WEIGHT 1		-0.00	-0.14	0.51++	0.20	0.04	0.09	0.00
NODULE WEIGHT 2		-0.10	0.02	0.37++	0.12	-0.05	0.09	0.00
PLANT HEIGHT		-0.05	-0.05	0.36++	-0.01	0.21	0.49++	0.00
LOGGING		0.11	0.06	0.01	0.03	0.31+	0.27+	0.00
SHATTER		1.00	0.10	-0.14	-0.22	0.06	0.17	0.00
PLANTS HARVEST		0.10	1.00	-0.01	-0.10	0.07	-0.06	0.00
PODS PER PLANT		-0.14	-0.01	1.00	-0.01	-0.11	-0.04	0.00
100 SEED WEIGHT		-0.22	-0.10	-0.01	1.00	0.23	0.30+	0.00
QUALITY OF SEED		0.06	0.07	-0.11	0.23	1.00	0.42++	0.00
DISEASE I		0.17	-0.06	-0.04	0.30+	0.42++	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 88 EXPERIMENT 404 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPTER	1.00	191.75	43.28	14.80	2.25
5	COBB	1.00	197.00	30.95	13.18	3.50
3	HARDER	1.00	195.00	35.22	12.63	3.00
6	BOSSIER	1.00	183.00	23.85	12.50	3.00
11	CLARK 63	1.00	190.50	18.08	13.43	2.75
2	HAMPTON 266A	1.00	199.00	19.67	13.23	3.00
15	18-69-2	1.00	196.75	36.85	11.80	2.50
10	COLUMBUS	1.00	194.25	20.20	13.05	2.50
13	WILLIAMS	1.00	196.00	25.50	14.98	2.25
9	FORREST	1.00	196.00	25.08	10.48	3.00
8	TRACY	1.00	195.50	17.55	13.35	3.00
12	WOODWORTH	1.00	186.75	15.48	12.28	2.75
4	IMPROVED PELICAN	2.00	198.25	24.00	9.50	3.75
7	DAVIS	1.00	191.75	16.43	11.00	2.75
14	CALLAND	1.00	198.25	14.23	11.53	3.50
GRAND MEAN						
		1.07	193.98	24.42	12.51	2.90
STANDARD ERROR OF A VARIETY MEAN		0.00	3.65	3.76	0.62	0.35
COEFFICIENT OF VARIATION		0.00%	3.77%	30.80%	9.97%	24.13%
5% LSD VARIETY MEANS (*****=NS)		0.00	*****	10.75	1.78	*****
C O R R E L A T I O N S						
		(+ - PROB=.05			++ - PROB=.01)	
YIELD	KG/HA	-0.13	0.25+	0.70++	0.65++	-0.10
DAYS TO FLOWER		0.20	0.07	0.51++	-0.23	0.03
DAYS TO MATURITY		0.00	0.05	0.67++	0.07	0.01
NODULE NUMBER 1		-0.00	0.15	0.16	0.08	-0.15
NODULE NUMBER 2		0.14	0.19	0.20	0.18	-0.05
NODULE WEIGHT 1		0.02	0.09	0.18	-0.06	0.04
NODULE WEIGHT 2		0.17	0.09	0.24	0.05	0.06
PLANT	HEIGHT	0.37++	0.16	0.51++	0.12	-0.03
	LOGGING	0.36++	0.15	0.21	0.13	0.19
	SHATTER	1.00	0.14	-0.01	-0.44++	0.30+
PLANTS	HARVEST	0.14	1.00	0.18	0.01	0.54++
PODS PER	PLANT	-0.01	0.18	1.00	0.40++	0.14
100 SEED	WEIGHT	-0.44++	0.01	0.40++	-0.16	-0.02
QUALITY	OF SEED	0.30+	0.09	-0.16	1.00	-0.35++
DISEASE	I	0.54++	0.14	-0.02	-0.35++	1.00
DISEASE	II	0.00	0.00	0.00	-0.18	0.14
DISEASE	III	0.00	0.00	0.00	0.00	1.00
				0.00	0.00	0.00
				0.00	0.00	1.00

TABLE 89

EXPERIMENT 484

YEAR 1975

REGION - AFRICA  
 SITE - NJALA  
 LATITUDE - 8 DEG. N  
 COOPERATOR - S.M. FUNNAH  
 DATE PLANTED - SEPTEMBER 18, 1975  
 SOIL TYPE - WELL DRAINED, GRAVELLY  
 FERTILIZER USED (KG/HA) - N 60.0, P 66.0, K 40.0  
 AMOUNT OF MOISTURE - 386 MM

COUNTRY - SIERRA LEONE  
 ELEVATION - 51 M  
 LONGITUDE - 12 DEG. W  
 DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NUMBER 1	NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	1483.96	30.00	77.75	95.25	145.25	0.55	2.98	25.25	1.00
14	CALLAND	1327.14	27.00	76.50	59.25	140.25	0.40	2.63	38.00	1.00
10	COLUMBUS	1280.30	28.25	78.00	109.25	241.50	0.35	3.25	40.25	1.00
13	WILLIAMS	1168.73	28.75	76.00	89.75	150.25	0.47	2.29	35.00	1.00
9	FORREST	1161.19	28.75	76.50	82.00	215.25	0.47	2.63	26.75	1.00
5	COBB	1148.65	28.75	80.25	114.50	239.50	0.62	3.49	23.50	1.00
3	HARDEE	1122.77	33.00	77.75	160.75	356.50	0.66	4.45	23.50	1.00
15	SEMMES	1116.01	30.00	79.00	98.25	118.75	0.38	2.15	17.75	1.00
2	HAMPTON 266A	998.74	28.50	79.00	137.50	185.25	0.64	2.44	21.00	1.00
1	JUPITER	984.53	35.00	91.00	92.75	244.75	0.45	3.21	51.50	1.00
8	TRACY	958.82	28.50	74.75	122.00	148.75	0.56	2.57	23.25	1.00
12	WOODWORTH	952.65	28.25	74.00	70.75	92.00	0.27	1.65	34.50	1.00
11	CLARK 63	948.73	28.50	76.00	126.25	186.00	0.42	2.34	34.25	1.00
4	IMPROVED PELICAN	916.85	34.50	77.50	53.00	186.50	0.44	2.34	46.50	1.00
6	BOSSIER	885.55	27.00	74.75	121.50	172.50	0.60	2.52	18.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
CORRELATIONS										
(+ - PROB=-.05    +- - PROB=-.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.10	1.00	0.04	0.01	0.07	0.12	0.22	0.18	0.00
DAYS TO MATURITY		0.04	0.62++	1.00	-0.06	0.25	0.07	0.23	0.44++	0.00
NODULE NUMBER 1		0.01	0.62++	-0.12	1.00	0.08	0.04	0.15	0.39++	0.00
NODULE NUMBER 2		0.07	-0.06	0.08	0.66++	0.66++	0.49++	0.56++	-0.27+	0.00
NODULE WEIGHT 1		0.12	0.25	0.08	0.49++	1.00	0.49++	0.83++	0.05	0.00
NODULE WEIGHT 2		0.22	0.07	0.04	0.49++	0.49++	1.00	0.51++	-0.29+	0.00
PLANT HEIGHT		0.18	0.23	0.15	0.56++	0.83++	0.51++	1.00	-0.01	0.00
LODGING		0.00	0.44++	0.39++	-0.27+	0.05	-0.29+	-0.01	1.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PODS PER PLANT		0.29+	0.29+	0.26+	-0.23	-0.06	0.07	0.03	-0.06	0.00
100 SEED WEIGHT		0.39++	0.36++	0.36++	0.08	0.27+	0.14	0.27+	0.40++	0.00
QUALITY OF SEED		0.28+	-0.55++	-0.25+	0.07	-0.23	-0.02	-0.13	-0.12	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 89 EXPERIMENT 484 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	DAVIS	1.00	217.00	19.78	13.13	0.00
14	CALLAND	1.00	193.25	19.20	14.05	0.00
10	COLUMBUS	1.00	199.25	18.28	13.03	0.00
13	WILLIAMS	1.00	169.75	14.68	14.95	0.00
9	FORREST	1.00	186.25	16.93	11.45	0.00
5	COBB	1.00	182.25	19.95	12.98	0.00
3	HARDEE	1.00	174.75	22.55	11.43	0.00
15	SEMMES	1.00	220.00	16.83	12.60	0.00
2	HAMPTON 266A	1.00	176.50	18.63	13.00	0.00
1	JUPITER	1.00	189.50	23.53	11.38	0.00
8	TRACY	1.00	188.00	12.80	14.88	0.00
12	WOODWORTH	1.00	140.75	18.68	13.88	0.00
11	CLARK 63	1.00	149.00	14.98	12.85	0.00
4	IMPROVED PELICAN	1.00	215.00	19.78	9.80	0.00
6	BOSSIER	1.00	171.50	18.20	11.65	0.00
GRAND MEAN						
1.00 184.85 18.32 12.73 0.00						
STANDARD ERROR OF A VARIETY MEAN						
0.00 9.43 2.20 0.46 0.00						
COEFFICIENT OF VARIATION						
0.00% 10.20% 24.00% 7.16% 0.00%						
5% LSD VARIETY MEANS (*****=NS)						
0.00 26.94 *****						
C C R E L A T I O N S						
(+ - PROB=-.05 ++ - PROB=-.01)						
YIELD	KG/HA	0.00	0.29+	0.39++	0.00	0.00
DAYS TO FLOWER		0.00	0.29+	0.36++	0.00	0.00
DAYS TO MATURITY		0.00	0.26+	0.36++	0.00	0.00
NODULE NUMBER 1		0.00	-0.23	0.08	0.00	0.00
NODULE NUMBER 2		0.00	-0.06	0.27+	0.00	0.00
NODULE WEIGHT 1		0.00	0.07	0.14	0.00	0.00
NODULE WEIGHT 2		0.00	0.03	0.27+	0.00	0.00
PLANT	HEIGHT	0.00	-0.06	0.40++	0.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00
PODS PER PLANT		0.00	-0.13	-0.13	0.00	0.00
100 SEED WEIGHT		0.00	-0.14	1.00	0.00	0.00
QUALITY OF SEED		0.00	-0.23	-0.23	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	1.00



TABLE 90 EXPERIMENT 619 YEAR 1975

REGION - AFRICA COUNTRY - SWAZILAND  
 SITE - BIGBEND ELEVATION - 150 M  
 LATITUDE - 26 DEG. 52 MIN. S LONGITUDE - 31 DEG. 55 MIN. E  
 COOPERATOR - CROP AGRONOMIST, IOWVLE EXPERIMENT STATION  
 DATE PLANTED - DECEMBER 3, 1975 DATE HARVESTED - MARCH, 1976  
 SOIL TYPE - SAND 30%, SILT 20%, CLAY 50%, PH 7.7  
 FERTILIZER USED (KG/HA) - P 40.0, K 60.0  
 AMOUNT OF MOISTURE - 687 MM (550 MM FROM IRRIGATION)  
 LOCAL VARIETY - PIONEER 701

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	2917.25	62.00	134.00	43.50	94.75	0.00	0.00	0.00	67.80	3.25
9	FORREST	2750.55	44.00	136.00	80.00	110.75	0.00	0.00	0.00	52.48	1.75
6	BOSSIER	2729.71	49.00	134.00	65.25	168.00	0.00	0.00	0.00	62.53	1.75
2	HAMPTON 266A	2583.85	51.00	143.75	75.25	85.50	0.00	0.00	0.00	71.32	2.50
15	SEMME	2563.01	48.00	134.00	62.50	101.50	0.00	0.00	0.00	55.03	1.25
8	TRACY	2563.01	44.00	136.00	79.75	156.25	0.00	0.00	0.00	48.35	2.75
13	WILLIAMS	2542.17	35.50	99.50	81.50	66.75	0.00	0.00	0.00	45.85	1.00
5	COBB	2500.50	55.00	147.00	20.50	52.75	0.00	0.00	0.00	61.50	2.00
3	HARDEE	2396.31	62.00	147.00	52.50	107.25	0.00	0.00	0.00	89.25	3.75
10	COLUMBUS	2333.80	35.00	104.50	63.50	80.00	0.00	0.00	0.00	62.95	1.50
11	CLARK 63	2229.61	35.00	104.50	46.50	81.50	0.00	0.00	0.00	60.60	1.50
14	PIONEER 701	2062.91	56.00	134.00	55.50	138.50	0.00	0.00	0.00	54.75	1.75
12	WOODWORTH	1812.86	45.25	99.50	61.25	45.50	0.00	0.00	0.00	45.68	2.00
1	JUPITER	1521.14	69.75	157.00	28.00	55.50	0.00	0.00	0.00	116.93	4.50
4	IMPROVED PELICAN	1083.55	68.00	149.50	29.50	32.75	0.00	0.00	0.00	107.80	3.00
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% ISI VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
(+ - PROB=.05 +- - PROB=.01)											
YIELD	KG/HA	1.00									
DAYS TO FLOWER		-0.32+									
DAYS TO MATURITY		1.00									
NODULE NUMBER 1		-0.11									
NODULE NUMBER 2		0.71++									
NODULE WEIGHT 1		-0.37++									
NODULE WEIGHT 2		-0.29+									
PLANT		0.00									
HEIGHT		0.00									
LODGING		0.00									
SHATTER		0.00									
HARVEST		0.00									
PLANT		0.00									
PODS PER 100 SEED		0.00									
QUALITY OF SEED		0.00									
PLANTS		0.00									
PODS PER 100 SEED		0.00									
QUALITY OF SEED		0.00									

TABLE 90 EXPERIMENT 619 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
7	DAVIS	2.00	179.75	50.85	18.90	2.25	43.7	22.2
9	FORREST	1.75	170.75	44.30	15.43	3.75	42.4	23.0
6	BOSSIER	1.00	146.00	47.28	15.08	1.75	45.9	21.9
2	HAMPTON 266A	1.30	162.30	53.78	18.35	2.75	43.7	21.6
15	SEWIS	1.00	175.75	39.58	16.08	2.00	44.6	21.4
8	TRACY	3.00	152.75	50.28	17.05	3.25	45.8	21.1
13	WILLIAMS	1.75	176.50	23.28	19.28	1.50	42.5	23.2
5	COBB	2.50	57.75	108.05	17.18	1.75	41.4	23.2
3	HARDEE	1.75	157.00	66.23	15.35	2.00	45.5	21.1
10	COLUMBUS	2.25	167.75	30.08	16.25	3.00	45.3	21.1
11	CLARK 63	1.75	144.75	26.90	19.10	2.50	42.3	24.6
14	PICNEER 701	1.00	146.25	39.73	21.50	3.00	44.0	20.1
12	WOODWORTH	1.75	133.25	23.48	16.95	2.00	40.8	25.0
1	JUPITER	3.25	140.75	43.00	17.83	4.25	45.5	19.2
4	IMPROVED PELICAN	3.50	171.00	35.23	13.75	2.50	43.6	20.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****=NS)								
CORRELATIONS (+ - PROB=.05 ** - PROB=.01)								
YIELD	KG/HA	-0.46**	0.15	0.23	0.13	-0.29+		
DAYS TO FLOWER		0.28+	-0.10	0.32+	-0.12	0.13		
DAYS TO MATURITY		0.22	-0.14	0.54**	-0.22	0.30+		
NODULE NUMBER 1		-0.21	0.16	-0.20	0.06	-0.09		
NODULE NUMBER 2		-0.28+	0.04	0.32	0.01	-0.36		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	0.41**	0.06	0.09	-0.27+	0.26+		
LOGGING		0.38**	-0.01	0.26+	-0.10	0.30+		
SHATTER		1.00	-0.08	0.05	-0.29+	0.36**		
PLANTS	HARVEST	-0.08	1.00	-0.62**	-0.06	0.12		
PODS PER	PLANT	0.05	-0.62**	1.00	-0.38	-0.14		
100 SEED	WEIGHT	-0.29+	-0.06	-0.08	1.00	-0.00		
QUALITY	OF SEED	0.36**	0.12	-0.14	-0.00	1.00		

TABLE 91 EXPERIMENT 620 YEAR 1975

REGION - AFRICA  
 SITE - MAIKERNS  
 LATITUDE - 26 DEG. 32 MIN. S  
 COOPERATOR - CROP AGECNOMIST, MAIKERNS RESEARCH STATION  
 DATE PLANTED - NOVEMBER 18, 1975 DATE HARVESTED - MARCH, 1976  
 SOIL TYPE - SAND 61%, SILT 15%, CLAY 24%, PH 6.1  
 FERTILIZER USED (KG/HA) - P 40.0, K 60.0  
 AMOUNT OF MOISTURE - 1277 MM  
 LOCAL VARIETY - PIONEER 701

COUNTRY - SWAZILAND

ELEVATION - 800 M

LONGITUDE - 31 DEG. 10 MIN. E

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	PAYS IC FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	ICING
13	WILLIAMS	3792.42	64.00	112.00	243.25	186.00	0.00	0.00	0.00	72.27	1.50
10	COLUMBUS	3469.44	64.00	132.00	252.50	227.25	0.00	0.00	0.00	91.95	2.25
7	DAVIS	3215.23	73.00	154.00	161.00	161.00	0.00	0.00	0.00	103.93	4.75
15	SEWES	3183.97	68.50	154.00	152.75	117.75	0.00	0.00	0.00	78.23	3.00
9	FORREST	3093.12	64.00	154.00	176.00	149.25	0.00	0.00	0.00	88.65	4.50
4	IMPROVED FELICAN	2942.25	100.00	161.00	86.00	123.75	0.00	0.00	0.00	142.28	4.50
11	CLARK 63	2913.08	64.00	112.00	248.00	209.75	0.00	0.00	0.00	70.70	1.50
12	WOODWORTH	2688.04	64.00	112.00	202.50	180.25	0.00	0.00	0.00	62.43	1.25
5	COBB	2633.86	76.50	161.00	187.00	191.25	0.00	0.00	0.00	81.82	1.25
8	TRACY	2521.34	64.00	139.00	177.75	265.25	0.00	0.00	0.00	71.30	1.75
2	HAMPTON 266A	2506.75	73.00	154.00	118.75	171.75	0.00	0.00	0.00	93.80	3.25
14	PIONEER 701	2396.31	73.00	154.00	263.25	241.00	0.00	0.00	0.00	72.25	2.75
3	HARDEE	2204.61	87.00	161.00	125.75	252.00	0.00	0.00	0.00	101.75	2.50
6	BOSSIER	2031.66	73.00	154.00	289.00	243.50	0.00	0.00	0.00	94.90	2.50
1	JUPITER	1319.01	108.00	181.00	123.75	109.00	0.00	0.00	0.00	194.78	5.00
	GRAND MEAN	2727.41	74.40	146.33	187.15	191.25	0.00	0.00	0.00	94.73	2.82
	STANDARD ERROR OF A VARIETY MEAN	442.23	1.10	0.00	30.96	45.31	0.00	0.00	0.00	2.31	0.35
	COEFFICIENT OF VARIATION	32.43%	2.97%	0.00%	33.08%	47.38%	0.00%	0.00%	0.00%	4.87%	24.50%

5% ISI VARIETY MEANS (\*\*\*\*\*=NS)

C O R R E L A T I O N S (+ - PROE=.05 +- - ERCE=.01)

YIELD	KG/HA	1.00	-0.37++	-0.37++	0.10	0.02	0.00	0.00	0.00	-0.33++	-0.13
DAYS TO FLOWER		-0.37++	1.00	0.72++	-0.46++	-0.19	0.00	0.00	0.00	0.89++	0.53++
DAYS TO MATURITY		-0.37++	0.72++	1.00	-0.41++	-0.14	0.00	0.00	0.00	0.68++	0.61++
NODULE NUMBER 1		0.10	-0.46++	-0.41++	1.00	0.24	0.00	0.00	0.00	-0.39++	-0.35++
NODULE NUMBER 2		0.02	-0.19	-0.14	0.24	1.00	0.00	0.00	0.00	-0.28++	-0.36++
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
PLANT HEIGHT		-0.33++	0.89++	0.68++	-0.39++	-0.28+	0.00	0.00	0.00	1.00	0.65++
ICDGLING		-0.13	0.53++	0.61++	-0.35++	-0.36++	0.00	0.00	0.00	0.65++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.23	-0.08	-0.05	0.11	-0.21	0.00	0.00	0.00	0.19	0.43++
PLANT		-0.22	0.42++	0.50++	-0.24	-0.05	0.00	0.00	0.00	0.20	-0.05
POIS PER 100 SEED		0.29+	-0.51++	-0.51++	0.32+	0.22	0.00	0.00	0.00	-0.59++	-0.59++
QUALITY OF SEED		-0.26+	0.26+	0.13	-0.09	0.02	0.00	0.00	0.00	0.22	0.03

TABLE 91 EXPERIMENT 620 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
13	WILLIAMS	1.00	181.50	24.15	25.63	2.00	44.9	20.3
10	COLUMBUS	1.00	155.50	30.68	21.33	2.25	46.4	20.3
7	DAVIS	1.00	175.50	70.48	16.48	2.50	41.7	21.1
15	SEMMES	1.00	155.50	57.38	20.43	2.25	44.8	20.0
9	FOREST	1.00	164.75	60.83	21.08	1.75	42.3	21.9
4	IMPROVED PELICAN	1.00	150.00	123.85	14.33	2.75	44.7	19.2
11	CLARK 63	1.00	109.50	37.68	24.13	2.50	44.7	19.8
12	WOODWORTH	1.00	75.00	52.58	20.35	2.75	43.1	20.3
5	COBB	1.00	13.00	357.30	20.55	3.00	44.3	20.1
8	TRACY	1.00	123.75	56.88	19.63	3.25	44.0	18.7
2	HAMPTON 266A	1.00	128.75	68.20	20.60	1.75	43.0	20.4
14	PIONEER 7J1	1.00	113.50	85.15	22.73	2.50	44.5	18.2
3	HARDEE	1.00	49.00	166.53	19.88	2.00	43.8	20.0
6	BOSSIER	1.00	147.00	64.18	19.50	2.00	45.5	20.0
1	JUPITER	1.00	145.00	130.73	17.80	3.75	46.5	17.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****=NS)								
C C R E I A T I C N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.23	-0.22	0.29+	-0.26+		
DAYS TO FLOWER		0.00	-0.08	0.42++	-0.51++	0.26+		
DAYS TO MATURITY		0.00	-0.05	0.50++	-0.51++	0.13		
NODULE NUMBER 1		0.00	0.11	-0.24	0.32+	-0.02		
NODULE NUMBER 2		0.00	-0.21	-0.05	0.22	0.02		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		0.00	0.19	0.20	-0.51++	0.22		
LOADING		0.00	0.43++	-0.05	-0.59++	0.03		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.62++	-0.09	0.00		
PODS PER PLANT		0.00	-0.62++	1.00	-0.22	0.21		
100 SEED WEIGHT		0.00	-0.39	-0.22	1.00	-0.16		
QUALITY OF SEED		0.00	-0.20	0.21	-0.16	1.00		

TABLE 92 EXPERIMENT 618 YEAR 1975

REGION - AFRICA COUNTRY - SWAZILAND  
 SITE - WALKERNS ELEVATION - 1500 M  
 LATITUDE - 26 DEG. 15 MIN. S LONGITUDE - 31 DEG. E  
 COOPERATOR - CROP AGRONOMIST, WALKERNS RESEARCH STATION  
 DATE PLANTED - NOVEMBER 19, 1975 DATE HARVESTED - APRIL, 1976  
 SOIL TYPE - SAND 55%, SILT 15%, CLAY 30%, PH 5.7  
 FERTILIZER USED (KG/HA) - P 40.0, K 60.0  
 AMOUNT OF MOISTURE - 1241 MM  
 LOCAL VARIETY - PIONEER 701

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURE	MODUL NUMBER 1	MODUL NUMBER 2	MODUL WEIGHT 1	MODUL WEIGHT 2	PLANT HEIGHT	MODUL WEIGHT 1	MODUL WEIGHT 2	PLANT HEIGHT	MODUL WEIGHT 1	MODUL WEIGHT 2	PLANT HEIGHT	MODUL WEIGHT 1	MODUL WEIGHT 2	PLANT HEIGHT
8	FORREST	2246.28	80.00	197.00	0.00	0.00	0.00	0.00	84.43	0.00	0.00	84.43	0.00	0.00	84.43	0.00	0.00	84.43
3	HARDEE	2047.49	105.00	197.00	0.00	0.00	0.00	0.00	77.18	0.00	0.00	77.18	0.00	0.00	77.18	0.00	0.00	77.18
12	PIONEER 701	2014.99	91.00	177.50	0.00	0.00	0.00	0.00	73.40	0.00	0.00	73.40	0.00	0.00	73.40	0.00	0.00	73.40
9	COLUMBUS	1808.69	60.00	143.25	0.00	0.00	0.00	0.00	64.10	0.00	0.00	64.10	0.00	0.00	64.10	0.00	0.00	64.10
6	DAVIS	1650.33	91.00	197.00	0.00	0.00	0.00	0.00	91.22	0.00	0.00	91.22	0.00	0.00	91.22	0.00	0.00	91.22
11	WILLIAMS	1258.58	60.00	132.00	0.00	0.00	0.00	0.00	51.03	0.00	0.00	51.03	0.00	0.00	51.03	0.00	0.00	51.03
5	BOSSIER	1223.16	88.25	190.50	0.00	0.00	0.00	0.00	88.47	0.00	0.00	88.47	0.00	0.00	88.47	0.00	0.00	88.47
13	SEMMES	1191.90	85.50	190.50	0.00	0.00	0.00	0.00	81.20	0.00	0.00	81.20	0.00	0.00	81.20	0.00	0.00	81.20
7	TRACY	1143.98	82.75	147.00	0.00	0.00	0.00	0.00	61.58	0.00	0.00	61.58	0.00	0.00	61.58	0.00	0.00	61.58
4	IMPROVED PELICAN	1098.14	105.00	197.00	0.00	0.00	0.00	0.00	129.60	0.00	0.00	129.60	0.00	0.00	129.60	0.00	0.00	129.60
2	HAMPTON 266A	1002.26	91.00	190.50	0.00	0.00	0.00	0.00	80.02	0.00	0.00	80.02	0.00	0.00	80.02	0.00	0.00	80.02
1	JUPITER	871.01	109.25	222.00	0.00	0.00	0.00	0.00	141.93	0.00	0.00	141.93	0.00	0.00	141.93	0.00	0.00	141.93
10	CLARK 63	489.68	60.00	140.75	0.00	0.00	0.00	0.00	50.63	0.00	0.00	50.63	0.00	0.00	50.63	0.00	0.00	50.63
	GRAND MEAN	1388.19	85.29	178.62	0.00	0.00	0.00	0.00	82.67	0.00	0.00	82.67	0.00	0.00	82.67	0.00	0.00	82.67
	STANDARD ERROR OF A VARIETY MEAN	239.62	1.56	3.78	0.00	0.00	0.00	0.00	3.28	0.00	0.00	3.28	0.00	0.00	3.28	0.00	0.00	3.28
	COEFFICIENT OF VARIATION	34.52%	3.65%	4.23%	0.00%	0.00%	0.00%	0.00%	7.93%	0.00%	0.00%	7.93%	0.00%	0.00%	7.93%	0.00%	0.00%	7.93%
	5% LSD VARIETY MEANS (*****=NS)	687.28	4.47	10.83	0.00	0.00	0.00	0.00	9.40	0.00	0.00	9.40	0.00	0.00	9.40	0.00	0.00	9.40
C O R R E L A T I O N S																		
	YIELD	1.00	0.10	0.06	0.00	0.00	0.00	0.00	-0.12	0.00	0.00	-0.12	0.00	0.00	-0.12	0.00	0.00	-0.12
	DAYS TO FLOWER	0.10	1.00	0.84**	0.00	0.00	0.00	0.00	0.77**	0.00	0.00	0.77**	0.00	0.00	0.77**	0.00	0.00	0.77**
	DAYS TO MATURITY	0.06	0.84**	1.00	0.00	0.00	0.00	0.00	0.80**	0.00	0.00	0.80**	0.00	0.00	0.80**	0.00	0.00	0.80**
	MODUL NUMBER 1	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
	MODUL NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
	MODUL WEIGHT 1	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	MODUL WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
	PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LODGING	-0.12	0.77**	0.80**	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
	SHATTER	-0.04	0.34*	0.34*	0.00	0.00	0.00	0.00	0.40**	0.00	0.00	0.40**	0.00	0.00	0.40**	0.00	0.00	0.40**
	HARVEST	-0.10	0.36**	0.37**	0.00	0.00	0.00	0.00	0.30*	0.00	0.00	0.30*	0.00	0.00	0.30*	0.00	0.00	0.30*
	PODS PER PLANT	-0.02	0.14	0.29*	0.00	0.00	0.00	0.00	0.47**	0.00	0.00	0.47**	0.00	0.00	0.47**	0.00	0.00	0.47**
	100 SEED WEIGHT	0.47**	0.34*	0.11	0.00	0.00	0.00	0.00	-0.04	0.00	0.00	-0.04	0.00	0.00	-0.04	0.00	0.00	-0.04
	QUALITY OF SEED	0.11	-0.40**	-0.29*	0.00	0.00	0.00	0.00	-0.23	0.00	0.00	-0.23	0.00	0.00	-0.23	0.00	0.00	-0.23
		-0.22	0.16	0.24	0.00	0.00	0.00	0.00	0.34*	0.00	0.00	0.34*	0.00	0.00	0.34*	0.00	0.00	0.34*



TABLE 92 EXPERIMENT 618 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	FORREST	1.00	130.30	47.48	19.20	4.50	44.1	18.4
3	HEDEJ	1.75	27.75	94.92	16.48	3.25	46.6	15.6
12	PIOWER 701	1.00	45.25	97.52	22.30	4.00	46.3	15.9
9	COLUMBUS	1.00	85.25	39.40	24.35	3.75	49.2	18.1
6	DAVIS	1.50	120.75	37.90	19.53	3.50	46.2	16.9
11	WILLIAMS	1.00	98.00	40.70	21.18	3.50	47.2	18.4
5	BOSSIER	1.25	115.25	31.85	18.05	4.50	49.1	19.1
13	3EMMES	1.50	129.00	37.73	20.93	4.25	47.9	17.8
7	TRACY	1.00	69.50	52.60	19.50	4.00	47.9	13.4
4	IMPROVED PELICAN	1.25	151.75	60.70	12.95	4.25	47.9	15.8
2	HAMPTON 266A	1.25	71.50	38.90	20.18	3.75	44.4	17.4
1	JUPITER	1.50	103.00	35.13	20.73	4.25	44.0	19.1
10	CLARK 63	1.00	30.50	25.03	19.93	3.00	45.2	18.4
STANDARD ERROR OF A VARIETY MEAN								
	YIELD	1.23	90.62	49.22	19.64	3.88		
	DAYS TO FLOWER	0.25	15.97	9.18	1.36	0.44		
	DAYS TO MATURITY	41.14%	35.03%	37.32%	13.83%	22.75%		
	NODULE NUMBER 1	*****	45.53	26.34	3.89	*****		
	NODULE NUMBER 2							
	NODULE WEIGHT 1							
	NODULE WEIGHT 2							
	PLANT							
	LODGING							
	SHATER							
	PLANTS							
	PODS PER PLANT							
	100 SEED WEIGHT							
	QUALITY OF SEED							
C O A R E L A T I O N S								
	YIELD	-0.10	-0.02	0.47++	0.11	-0.22		
	DAYS TO FLOWER	0.36++	0.14	0.34+	-0.40++	0.16		
	DAYS TO MATURITY	0.37++	0.29+	0.11	-0.29+	0.24		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT	0.30+	0.47++	-0.04	-0.35+	0.34+		
	LODGING	0.01	0.27	-0.10	-0.23	0.00		
	SHATER	1.00	0.12	-0.03	-0.02	-0.03		
	PLANTS	0.12	1.00	-0.41++	-0.23	0.40++		
	PODS PER PLANT	-0.03	-0.41++	1.00	-0.04	-0.16		
	100 SEED WEIGHT	-0.02	-0.02	-0.04	1.00	-0.20		
	QUALITY OF SEED	-0.03	0.40++	-0.16	-0.20	1.00		

TABLE 93 EXPERIMENT 999 YEAR 1975

REGION - AFRICA COUNTRY - TANZANIA  
 SITE - ILONGA ELEVATION - 506 M  
 LATITUDE - 6 DEG. 42 MIN. S LONGITUDE - 37 DEG. 2 MIN. E  
 COOPERATORS - P.N. PAEL, M.E.T. MNEAGA  
 DATE PLANTED - MARCH 5, 1976 DATE HARVESTED - JUNE, 1976  
 SOIL TYPE - SANDY LOAM  
 FERTILIZER USED (KG/HA) - N 25.0, P 75.0  
 AMOUNT OF MOISTURE - 463 MM  
 NUMBER OF IRRIGATIONS - 3  
 LOCAL VARIETIES - 3H/1, 1H/192

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT 1	NODULE HEIGHT 2	PLANT HEIGHT	ICDGING
14	1H/192	1643.66	51.50	114.75	3.00	0.00	3.00	0.00	0.00	0.00	76.00	0.00
13	3H/1	1443.21	54.00	117.25	0.00	0.00	0.00	0.00	0.00	0.00	73.50	0.00
4	IMPROVED PELICAN	1187.74	36.75	85.50	0.00	0.00	0.00	0.00	0.00	0.00	39.50	0.00
12	WILLIAMS	1077.72	33.00	95.75	0.00	0.00	0.00	0.00	0.00	0.00	26.75	0.00
7	DAVIS	1050.63	31.25	78.50	0.00	0.00	0.00	0.00	0.00	0.00	19.75	0.00
1	JUPITER	1045.21	39.50	106.25	0.00	0.00	0.00	0.00	0.00	0.00	35.00	0.00
2	HAMPTON 266A	1009.37	31.00	83.00	0.00	0.00	0.00	0.00	0.00	0.00	17.25	0.00
9	FCREST	954.77	31.25	94.25	0.00	0.00	0.00	0.00	0.00	0.00	19.50	0.00
6	BOSSIER	942.27	32.00	102.75	0.00	0.00	0.00	0.00	0.00	0.00	32.00	0.00
8	TRACY	675.13	31.00	75.50	0.00	0.00	0.00	0.00	0.00	0.00	17.00	0.00
5	COBB	583.87	30.75	96.75	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00
10	COLUMBUS	575.53	32.25	100.75	0.00	0.00	0.00	0.00	0.00	0.00	22.00	0.00
3	HARDEE	536.36	36.50	101.50	0.00	0.00	0.00	0.00	0.00	0.00	15.50	0.00
11	WOODWORTH	95.02	33.75	79.25	0.00	0.00	0.00	0.00	0.00	0.00	17.50	0.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% ISI VARIETY MEANS (*****=NS)												
CORRELATIONS												
YIELD KG/HA												
DAYS TO FLOWER												
DAYS TO MATURITY												
NODULE NUMBER 1												
NODULE NUMBER 2												
NODULE WEIGHT 1												
NODULE WEIGHT 2												
PLANT HEIGHT												
LODGING												
SHATTER												
HARVEST												
PLANTS PER PLANT												
100 SEED WEIGHT												
QUALITY OF SEED												

TABLE 93 EXPERIMENT 999 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	1R/192	0.00	160.25	47.00	0.00	0.00
13	3H/1	0.00	176.25	32.25	0.00	0.00
4	IMPROVED PELICAN	0.00	165.75	27.00	0.00	0.00
12	WILLIAMS	0.00	110.00	16.75	0.00	0.00
7	DAVIS	0.00	145.75	11.50	0.00	0.00
1	JUPITER	0.00	83.50	22.25	0.00	0.00
2	HAMPTON 266A	0.00	135.00	14.00	0.00	0.00
5	FCRREST	0.00	139.25	13.75	0.00	0.00
6	BCSSIER	0.00	92.50	31.75	0.00	0.00
8	TRACY	0.00	112.25	12.50	0.00	0.00
5	COBB	0.00	46.75	21.25	0.00	0.00
10	COLUMBUS	0.00	88.00	14.75	0.00	0.00
3	HARDEF	0.00	35.75	22.50	0.00	0.00
11	WODWORTH	0.00	15.75	15.00	0.00	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	107.63	21.59	0.00	0.00
COEFFICIENT OF VARIATION		0.00%	13.13	2.28	0.00	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	24.39%	21.10%	0.00%	0.00%
			37.55	6.52	0.00	0.00
C O R R E L A T I O N S						
		(+ - PROB=.05		++ - PROB=.01)		
YIELD KG/HA		0.00	0.80++	0.56++	0.00	0.00
DAYS TO FLOWER		0.00	0.34++	0.72++	0.00	0.00
DAYS TO MATURITY		0.00	0.13	0.65++	0.00	0.00
NODE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.55++	0.81++	0.00	0.00
LOADING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.29+	0.00	0.00
PODS PER PLANT		0.00	0.29+	1.90	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00

TABLE 94 EXPERIMENT 630 YEAR 1975

REGION - AFRICA  
SITE - LYAMUNGU  
LATITUDE - 3 DEG. 12 MIN. S  
COOPERATOR - R.I. CHAMBUJA  
DATE PLANTED - APRIL 5, 1976  
AMOUNT OF MOISTURE - 393 MM

COUNTRY - TANZANIA  
ELEVATION - 1020 M  
LONGITUDE - 37 DEG. 17 MIN. E  
DATE HARVESTED - AUGUST, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
6	DAVIS	2332.97	38.00	97.00	118.25	187.00	0.82	3.18	32.50	1.00
4	IMPROVED PELICAN	2301.29	28.00	91.75	58.75	87.00	0.52	1.48	29.00	1.00
8	FORREST	2094.17	31.00	90.00	61.00	102.75	0.55	1.23	36.25	1.00
5	BOSSIER	1907.88	26.00	89.00	67.75	87.75	0.87	1.30	24.25	1.00
11	WILLIAMS	1800.78	26.00	91.00	102.00	162.25	1.25	2.20	34.50	1.00
9	COLUMBUS	1626.16	26.00	97.00	76.00	106.75	0.95	2.08	32.75	1.00
1	JUPITER	1489.88	51.00	126.00	148.00	163.75	2.23	2.25	60.25	1.00
12	CALLAND	1261.92	26.00	101.00	59.00	147.50	0.95	2.38	34.50	1.00
13	SEMME	1115.64	27.00	97.00	54.25	98.25	0.60	1.18	24.25	1.00
3	HARDEE	791.41	37.00	120.00	39.00	103.25	0.30	1.65	27.75	1.00
7	TRACY	787.24	26.00	94.00	66.50	101.00	0.77	1.60	22.25	1.00
2	HAMPTON 266A	735.56	28.00	91.00	60.75	144.50	0.55	2.05	21.75	1.00
10	WOODWORTH	162.53	26.00	97.00	34.00	117.25	0.33	1.58	21.25	1.00
GRAND MEAN										
1415.96										
STANDARD ERROR OF A VARIETY MEAN										
121.25										
COEFFICIENT OF VARIATION										
17.13%										
5% ISI VARIETY MEANS (*****=NS)										
347.78										
C O R R E L A T I O N S										
(* - PROB=.05    ** - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER	0.15		0.15	-0.23	0.32+	0.03	0.23	0.16	0.35+	0.00
DAYS TO MATURITY	0.15		1.00	0.81+	0.45++	0.27+	0.47++	0.26	0.75++	0.00
NODULE NUMBER 1	-0.23		0.81++	1.00	0.22	0.15	0.36++	0.14	0.60++	0.00
NODULE NUMBER 2	0.32+		0.45++	0.22	1.00	0.40++	0.74++	0.33+	0.51++	0.00
NODULE WEIGHT 1	0.33		0.27+	0.15	0.40++	1.00	0.27	0.82++	0.30+	0.00
NODULE WEIGHT 2	0.23		0.47++	0.36++	0.74++	0.27	1.00	0.26	0.66++	0.00
PLANT HEIGHT	0.16		0.26	0.14	0.33+	0.82++	0.26	1.00	0.25	0.00
LOGGING	0.35+		0.75++	0.60++	0.51++	0.30+	0.66++	0.25	1.00	0.00
SHATTER	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS PER PLOT	-0.15		-0.22	-0.28+	-0.15	-0.10	-0.26	-0.04	-0.41+	0.00
PODS PER PLOT	0.70++		0.12	-0.22	0.21	-0.06	0.11	0.32	0.12	0.00
100 SEED WEIGHT	0.24		0.45++	0.45++	0.18	0.15	0.16	0.19	0.46++	0.00
QUALITY OF SEED	0.10		0.31+	0.38++	0.03	0.11	0.03	0.27	0.09	0.00
	-0.06		0.23	0.18	0.02	0.04	0.23	0.01	0.35++	0.00

TABLE 94 EXPERIMENT 630 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	DAVIS	2.00	147.00	30.70	21.40	1.75
4	IMPROVED PELICAN	2.00	169.75	26.80	20.00	2.25
8	FORREST	1.00	150.75	31.30	17.23	3.25
5	BOSSIER	2.00	140.75	28.92	20.28	2.25
11	WILLIAMS	1.00	93.75	34.80	19.10	1.50
9	COLUMBUS	1.00	117.50	35.45	18.93	3.00
1	JUPITER	1.00	121.50	36.95	20.60	3.50
12	CALLAND	1.00	100.00	27.53	20.55	3.00
13	SEMME	1.00	144.25	19.35	20.68	2.50
3	HARDEE	1.00	76.50	42.07	21.25	2.00
7	TRACY	2.00	70.00	26.17	18.40	2.25
2	HAMPTON 266A	1.00	126.00	28.35	19.58	3.25
10	WOODWORTH	3.00	36.75	17.97	19.03	1.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.46	114.96	29.72	19.77	2.48
COEFFICIENT OF VARIATION		0.00	11.40	2.28	0.60	0.25
5% ISI VARIETY MEANS (*****NS)		0.00	19.84%	15.33%	6.04%	20.28%
		0.00	32.71	6.53	1.71	0.72
C O R R E L A T I O N S						
		(+ - PROB=-.05		++ - PROB=-.01)		
YIELD KG/HA		0.70++		0.10		
DAYS TO FLOWER		-0.15	0.12	0.45++		
DAYS TO MATURITY		-0.22	-0.22	0.45++		
NODULE NUMBER 1		-0.15	0.21	0.03		
NODULE NUMBER 2		-0.10	-0.06	0.15		
NODULE WEIGHT 1		-0.26	0.11	0.16		
NODULE WEIGHT 2		-0.04	0.02	0.19		
PLANT HEIGHT		-0.41++	0.12	0.46++		
LDCGING		0.00	0.00	0.00		
SHATER		1.00	-0.26	-0.48++		
PLANTS HARVEST		-0.26	1.00	-0.06		
PODS PER PLANT		-0.48++	-0.06	1.00		
100 SEED WEIGHT		-0.04	0.09	0.06		
QUALITY OF SEED		-0.45++	0.19	0.17		
				-0.28+		
				1.00		
				-0.28+		
				1.00		



TABLE 95 EXPERIMENT 629 YEAR 1975

REGION - AFRICA COUNTRY - TANZANIA  
 SITE - MBEYA ELEVATION - 1700 M  
 LATITUDE - 8 DEG. 55 MIN. S LONGITUDE - 33 DEG. 32 MIN. E  
 COOPERATOR - A.E.M. TEMU  
 DATE PLANTED - JANUARY 5, 1976 DATE HARVESTED - MAY, 1976  
 SOIL TYPE - SILT  
 FERTILIZER USED (KG/HA) - P 20.0  
 AMOUNT OF MOISTURE - 772 MM  
 SUBSTITUTE VARIETIES - BLACKHAWK, MONROE  
 LOCAL VARIETY - H 1/1

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
2	HARDEE	2953.09	67.00	138.75	365.25	790.75	3.08	10.44	0.00	0.00
4	BOSSIER	2773.89	57.00	139.00	435.00	621.25	3.80	9.54	0.00	0.00
7	FORREST	2773.47	56.00	133.00	516.50	655.25	3.18	7.84	0.00	0.00
3	IMPROVED PELICAN	2566.76	54.00	138.00	533.50	575.50	4.34	8.56	0.00	0.00
10	BLACKHAWK	2508.42	63.00	133.00	354.50	843.75	2.92	8.99	0.00	0.00
5	DAVIS	2315.88	60.00	125.00	325.75	413.75	2.57	6.02	0.00	0.00
9	WILLIAMS	2245.45	42.00	118.00	584.75	563.50	3.52	6.77	0.00	0.00
13	MONROE	2153.76	62.00	138.75	870.75	1028.75	4.13	9.28	0.00	0.00
8	COLUMBUS	2047.91	54.00	134.00	662.75	858.25	5.10	11.26	0.00	0.00
1	HAMPTON 266A	1833.70	54.00	136.00	552.75	764.75	4.06	8.93	0.00	0.00
11	SEMES	1648.25	60.00	120.00	366.00	565.50	2.62	5.72	0.00	0.00
6	TRACY	1459.46	58.00	130.00	466.50	471.50	4.42	6.72	0.00	0.00
12	H 1/1	1454.87	62.00	133.25	678.75	1076.75	3.80	7.90	0.00	0.00
GRAND MEAN		2210.38	57.38	131.83	516.37	709.94	3.69	8.31	0.00	0.00
STANDARD ERROR OF A VARIETY MEAN		164.53	0.00	0.12	67.81	71.89	0.44	1.23	0.00	0.00
COEFFICIENT OF VARIATION		14.89%	0.00%	0.18%	26.27%	20.25%	23.69%	28.97%	0.00%	0.00%
5% LSC VARIETY MEANS (*****=NS)		471.90	0.00	0.34	194.51	206.19	1.25	*****	0.00	0.00
C O R R E L A T I O N S										
				(+ - PROB= .05			** - FRCB=.01)			
YIELD	KG/HA	1.00	0.04	0.30+	-0.10	-0.10	-0.10	0.17	0.00	0.00
DAYS TO FLOWER	0.04	1.00	0.43+	0.43+	-0.15	0.28+	-0.27	0.10	0.00	0.00
DAYS TO MATURITY	0.30+	0.30+	0.43+	1.00	0.25	0.39+	0.26	0.44+	0.00	0.00
NODULE NUMBER 1	-0.10	-0.10	-0.15	0.25	1.00	0.51+	0.61+	0.33+	0.00	0.00
NODULE NUMBER 2	-0.10	-0.10	0.28+	0.39+	0.51+	1.00	0.29+	0.63+	0.00	0.00
NODULE WEIGHT 1	-0.10	-0.10	-0.27	0.26	0.61+	0.29+	1.00	0.44+	0.00	0.00
NODULE WEIGHT 2	0.17	0.17	0.10	0.44+	0.33+	0.63+	0.44+	1.00	0.00	0.00
PLANT HEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT	0.03	0.03	-0.47+	-0.34+	0.02	-0.35+	0.02	-0.16	0.00	0.00
QUALITY OF SEED	-0.38+	-0.14	-0.04	0.49+	0.17	0.35+	0.17	-0.02	0.00	0.00

TABLE 95 EXPERIMENT 629 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
2	HARDEE	0.00	0.00	0.00	18.15	2.00
4	BOSSIER	0.00	0.00	0.00	18.40	2.00
7	FORREST	0.00	0.00	0.00	20.10	2.00
3	IMPROVED PELICAN	0.00	0.00	0.00	16.85	2.00
10	BLACKHAWK	0.00	0.00	0.00	14.70	2.00
5	DAVIS	0.00	0.00	0.00	18.70	2.00
9	WILLIAMS	0.00	0.00	0.00	21.15	3.00
13	MONROE	0.00	0.00	0.00	17.93	3.50
8	COLUMBUS	0.00	0.00	0.00	18.03	2.25
11	HAMPTON 266A	0.00	0.00	0.00	19.55	3.75
11	SEMMES	0.00	0.00	0.00	19.30	2.75
6	TRACY	0.00	0.00	0.00	18.03	2.00
12	H 1/1	0.00	0.00	0.00	15.65	3.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	0.00	0.00	18.19	2.50
COEFFICIENT OF VARIATION		0.00%	0.00%	0.00%	0.49	0.17
5% LSI VARIETY MEANS (*****=NS)		0.00	0.00	0.00	5.35%	13.20%
		0.00	0.00	0.00	1.40	0.47
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.00	0.00	0.03	-0.38++
DAYS TO FLOWER		0.00	0.00	0.00	-0.47++	-0.14
DAYS TO MATURITY		0.00	0.00	0.00	-0.34+	-0.04
NODULE NUMBER 1		0.00	0.00	0.00	0.02	0.49++
NODULE NUMBER 2		0.00	0.00	0.00	-0.35+	0.35++
NODULE WEIGHT 1		0.00	0.00	0.00	0.02	0.17
NODULE WEIGHT 2		0.00	0.00	0.00	-0.16	-0.02
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	1.00	0.18
QUALITY	OF SEED	0.00	0.00	0.00	0.18	1.00

TABLE 96 EXPERIMENT 628 YEAR 1975

REGION - AFRICA COUNTRY - TANZANIA  
 SITE - UKIRIGURU ELEVATION - 1199 M  
 LATITUDE - 2 DEG. 42 MIN. S LONGITUDE - 33 DEG. 1 MIN. E  
 COOPERATORS - C.S. MUHALET, A.M.K. MHOJA  
 DATE PLANTED - JANUARY 3, 1976 DATE HARVESTED - APRIL, 1976  
 SOIL TYPE - SANDY LOAM  
 FERTILIZER USED (KG/HA) - N 25.0, P 25.0  
 AMOUNT OF MOISTURE - 279 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	408.41	56.00	121.00	19.25	26.00	0.10	0.13	0.10	0.13	31.45	0.00
15	SEMME	333.40	45.00	76.00	27.75	34.75	0.11	0.24	0.11	0.24	11.93	0.00
4	IMPROVED PELICAN	258.38	35.00	75.00	23.25	18.25	0.08	0.12	0.08	0.12	11.80	0.00
3	HARDEE	241.71	56.00	81.00	28.25	20.00	0.20	0.33	0.20	0.33	15.25	0.00
2	HAMPTON 266A	225.34	44.50	78.00	26.75	14.75	0.07	0.06	0.07	0.06	12.35	0.00
10	COLUMBUS	200.04	35.00	80.50	9.00	12.50	0.04	0.09	0.04	0.09	11.33	0.00
7	DAVIS	191.70	46.00	78.50	27.25	25.75	0.10	0.21	0.10	0.21	16.53	0.00
6	BOSSIER	175.03	35.00	76.00	9.75	12.75	0.02	0.06	0.02	0.06	11.00	0.00
13	WILLIAMS	166.70	35.00	78.00	18.50	9.50	0.05	0.07	0.05	0.07	11.68	0.00
14	CALLAND	150.03	46.00	81.00	4.75	2.00	0.02	0.05	0.02	0.05	12.63	0.00
8	TRACY	150.03	35.00	75.00	8.00	5.00	0.03	0.07	0.03	0.07	11.45	0.00
12	WOODWORTH	133.36	35.00	76.50	3.50	5.75	0.01	0.04	0.01	0.04	13.13	0.00
5	COBB	125.02	44.00	79.50	12.25	19.50	0.05	0.17	0.05	0.17	14.35	0.00
5	FORREST	100.02	56.00	81.00	7.00	9.75	0.03	0.06	0.03	0.06	15.38	0.00
11	CLARK 63	66.68	35.00	80.50	6.50	1.50	0.03	0.01	0.03	0.01	11.73	0.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% LSD VARIETY MEANS (*****=NS)												
C O R R E L A T I O N S												
(* - PROB=.05 ** - PROB=.01)												
YIELD	KG/HA	1.00	0.20	0.33**	0.71**	0.65**	0.62**	0.48**	0.47**	0.48**	0.47**	0.00
DAYS TO FLOWER	1.00	0.20	1.00	0.53**	0.17	0.22	0.33*	0.29*	0.60**	0.29*	0.60**	0.00
DAYS TO MATURITY	0.33**	0.53**	0.17	1.00	0.07	0.17	0.14	0.05	0.89**	0.05	0.89**	0.00
NODULE NUMBER 1	0.71**	0.17	0.07	1.00	0.83**	0.83**	0.85**	0.75**	0.22	0.75**	0.22	0.00
NODULE NUMBER 2	0.65**	0.22	0.17	0.83**	1.00	1.00	0.73**	0.84**	0.34**	0.84**	0.34**	0.00
NODULE WEIGHT 1	0.62**	0.33*	0.14	0.85**	0.73**	0.73**	1.00	0.83**	0.33*	0.83**	0.33*	0.00
NODULE WEIGHT 2	0.48**	0.29*	0.05	0.75**	0.84**	0.84**	0.83**	1.00	0.23	0.83**	0.23	0.00
PLANT HEIGHT	0.47**	0.47**	0.60**	0.89**	0.22	0.34**	0.33*	0.23	1.00	0.23	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.29*	0.29*	-0.09	-0.16	0.16	0.16	0.21	0.06	-0.12	0.06	-0.12	0.00
PLANTS HARVEST	0.49**	0.49**	0.06	-0.02	0.31*	0.19	0.26*	0.13	0.02	0.26*	0.02	0.00
PODS PER PLANT	0.51**	0.51**	0.22	0.48**	0.48**	0.55**	0.45**	0.52**	0.51**	0.52**	0.51**	0.00
100 SEED WEIGHT	0.51**	0.51**	-0.05	0.53**	0.24	0.28*	0.11	0.10	0.49**	0.10	0.49**	0.00
QUALITY OF SEED	0.02	0.02	0.15	0.12	0.01	-0.09	-0.02	-0.10	0.06	-0.10	0.06	0.00

TABLE 96 EXPERIMENT 628 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.50	105.25	14.70	19.75	3.75
15	SEMME	3.00	143.50	5.68	13.00	3.00
4	IMPROVED PELICAN	2.00	161.75	6.95	13.00	3.25
3	HARDEE	2.00	125.00	8.80	10.75	3.50
2	HAMPTON 266A	2.00	129.00	6.20	13.75	5.00
10	COLUMBUS	1.50	160.25	7.17	14.25	3.00
7	DAVIS	1.00	94.50	8.00	13.25	3.25
6	BOSSIER	1.75	100.75	8.07	12.75	3.25
13	WILLIAMS	1.25	129.25	5.37	15.25	2.75
14	CALLAND	1.75	127.50	4.93	13.75	3.50
8	TRACY	2.75	79.25	5.62	13.50	3.50
12	WOODWORTH	1.25	95.75	5.25	14.75	3.50
5	COBB	1.25	23.00	14.33	16.50	2.00
9	FORREST	1.00	120.25	4.08	10.25	3.00
11	CLARK 63	1.50	29.25	7.73	13.75	2.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.70	108.28	7.52	13.88	3.27
COEFFICIENT OF VARIATION		0.26	16.71	1.72	0.98	0.26
5% ISI VARIETY MEANS (*****=NS)		30.33%	30.87%	45.83%	14.10%	16.06%
		0.74	47.70	4.92	2.79	0.75
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	0.29+	0.49++	0.51++	0.51++	0.02
DAYS TO FLOWER		-0.09	0.06	0.22	-0.05	0.15
DAYS TO MATURITY		-0.16	-0.02	0.48++	0.53++	0.12
NODULE NUMBER 1		0.16	0.31+	0.48++	0.24	0.01
NODULE NUMBER 2		0.16	0.19	0.55++	0.28+	-0.09
NODULE WEIGHT 1		0.21	0.26+	0.45++	0.11	-0.02
NODULE WEIGHT 2		0.06	0.13	0.52++	0.10	-0.10
PLANT	HEIGHT	-0.12	0.02	0.51++	0.49++	0.06
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.15	-0.11	-0.03	0.23
PLANTS	HARVEST	0.15	1.00	-0.19	-0.10	0.18
PODS PER PLANT		-0.11	-0.15	1.00	0.64++	-0.22
100 SEED WEIGHT		-0.03	-0.10	0.64++	1.00	-0.09
QUALITY OF SEED		0.23	0.18	-0.22	-0.09	1.00

TABLE 97 EXPERIMENT 394 YEAR 1975

REGION - AFRICA COUNTRY - TOGO  
 SITE - AMOUTCHOU ELEVATION - 160 M  
 LATITUDE - 7 DEG. 21 MIN. N LONGITUDE - 1 DEG. 10 MIN. E  
 COOPERATOR - I.R.A.T.-TOGO  
 DATE PLANTED - MAY 7, 1975 DATE HARVESTED - AUGUST, 1975  
 SOIL PH 6.0  
 FERTILIZER USED (KG/HA) - P 20.0, K 20.0  
 AMOUNT OF MOISTURE - 489 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	3667.40	31.75	110.25	122.75	181.00	0.00	0.00	58.50	1.00
7	DAVIS	3646.56	24.00	90.50	166.50	357.00	0.00	0.00	22.75	1.00
3	HARDEE	3208.97	29.25	90.00	197.00	270.00	0.00	0.00	28.75	1.00
9	FORREST	2813.06	24.00	85.75	52.00	276.75	0.00	0.00	28.75	1.00
6	BOSSIER	2771.39	24.75	88.25	62.75	293.25	0.00	0.00	27.25	1.00
4	IMPROVED PELICAN	2521.34	30.25	92.25	136.75	159.75	0.00	0.00	58.25	1.00
5	COBB	2396.31	23.25	89.75	30.00	160.00	0.00	0.00	23.25	1.00
2	HAMPTON 266A	2396.31	24.00	86.75	118.50	412.75	0.00	0.00	19.25	1.00
13	WILLIAMS	2271.29	21.00	82.50	105.00	341.00	0.00	0.00	38.25	1.00
15	SEMME	2250.45	23.25	90.25	77.25	278.25	0.00	0.00	17.75	1.00
14	CALLAND	2021.24	21.00	85.50	123.00	298.25	0.00	0.00	44.75	1.00
8	TRACY	2021.24	21.75	81.25	44.50	146.25	0.00	0.00	22.00	1.00
10	COLUMBUS	1979.56	21.00	82.00	71.75	315.75	0.00	0.00	35.00	1.00
11	CLARK 63	1937.89	21.00	81.00	46.25	237.25	0.00	0.00	35.75	1.00
12	WOODWORTH	1667.00	21.00	78.25	55.25	201.00	0.00	0.00	33.75	1.00
GRAND MEAN										
2504.67										
STANDARD ERROR OF A VARIETY MEAN										
237.90										
COEFFICIENT OF VARIATION										
19.00%										
5% LSD VARIETY MEANS (*****=NS)										
679.96										
CORRELATIONS										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.57++	0.63++	0.36++	0.20	0.00	0.00	0.23	0.00
DAYS TO FLOWER	1.00	0.57++	1.00	0.73++	0.40++	-0.19	0.00	0.00	0.42++	0.00
DAYS TO MATURITY	0.63++	0.73++	1.00	0.28+	0.28+	-0.03	0.00	0.00	0.39++	0.00
NODULE NUMBER 1	0.36++	0.40++	0.40++	0.28+	1.00	0.37++	0.00	0.00	0.27+	0.00
NODULE NUMBER 2	0.20	-0.19	-0.03	0.37++	0.37++	1.00	0.00	0.00	-0.11	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.23	0.42++	0.39++	0.27+	-0.11	0.00	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	0.04	0.04	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.76++	0.71++	0.73++	0.37++	0.18	0.01	0.00	0.00	0.13	0.00
100 SEED WEIGHT	0.16	-0.01	0.19	0.19	0.24	0.00	0.00	0.00	0.09	0.00
QUALITY OF SEED	-0.40++	-0.47++	-0.33++	-0.10	0.11	0.00	0.00	0.00	-0.22	0.00
DISEASE I	-0.26+	-0.53++	-0.47++	-0.22	0.28+	0.00	0.00	0.00	-0.41++	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 97 EXPERIMENT 394 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	168.25	32.28	24.00	2.00	42.1	24.6
7	DAVIS	1.00	207.75	22.78	22.75	2.50	43.0	22.8
3	HARDEE	1.00	180.75	26.45	23.25	1.75	42.1	25.5
9	FORREST	1.00	196.25	22.38	18.75	2.00	41.7	24.1
6	BOSSIER	1.00	175.25	22.75	22.75	1.75	44.1	22.9
4	IMPROVED PELICAN	1.00	221.25	24.68	19.00	1.25	44.8	23.8
5	COBB	1.00	184.50	21.28	22.00	2.25	39.1	25.9
2	HAMPTON 266A	1.00	179.75	23.75	23.75	3.25	40.8	26.2
13	WILLIAMS	1.00	202.00	19.25	24.00	2.50	43.1	24.6
15	SEMMES	1.00	190.75	17.53	21.00	2.00	43.3	23.1
14	CALLAND	1.00	193.00	19.13	26.75	3.75	43.2	22.5
8	TRACY	1.00	172.00	17.10	22.25	3.25	42.1	23.5
10	COLUMBUS	1.00	195.25	17.98	22.50	2.25	43.7	22.9
11	CLARK 63	1.00	173.00	19.20	21.50	2.25	42.0	25.1
12	WOODWORTH	1.00	180.75	15.95	18.75	3.00	40.7	24.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	188.03	21.24	22.20	2.38		
COEFFICIENT OF VARIATION		0.00	10.18	1.69	0.69	0.27		
5% LSD VARIETY MEANS (*****=NS)		0.00	10.83%	15.95%	6.25%	23.07%		
			29.10	4.84	1.98	0.79		
C O R R E L A T I O N S								
				(+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	0.00	0.04	0.76++	0.16	-0.40++	-0.26+	0.00
DAYS TO FLOWER		0.00	0.04	0.71++	-0.01	-0.47++	-0.53++	0.00
DAYS TO MATURITY		0.00	-0.02	0.73++	0.19	-0.33++	-0.47++	0.00
NODULE NUMBER 1		0.00	0.18	0.37++	0.19	-0.10	-0.22	0.00
NODULE NUMBER 2		0.00	0.18	0.01	0.24	0.11	0.28+	0.00
NODULE HEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE HEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.13	0.46++	0.09	-0.22	-0.41++	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	-0.05	-0.05	-0.24	-0.30+	0.01	0.00
100 SEED	WEIGHT	0.00	-0.05	1.00	0.12	-0.45++	-0.46++	0.00
QUALITY	OF SEED	0.00	-0.24	0.12	1.00	0.44++	0.06	0.00
DISEASE	I	0.00	-0.30+	-0.45++	0.44++	1.00	0.42++	0.00
DISEASE	II	0.00	0.01	-0.46++	0.06	0.42++	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 98

EXPERIMENT 393

YEAR 1975

REGION - AFRICA  
 SITE - DAVIE  
 LATITUDE - 6 DEG. 26 MIN. N  
 COOPERATOR - I.R.A.I.-TOGC  
 DATE PLANTED - MAY 2, 1975  
 SOIL TYPE - CLAY  
 FERTILIZER USED (KG/HA) - P 40.0, K 30.0  
 AMOUNT CF MOISTURE - 482 MM

COUNTRY - TOGO  
 ELEVATION - 95 M  
 LONGITUDE - 1 DEG. 13 MIN. E  
 DATE HARVESTED - AUGUST, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	3563.21	26.50	86.00	211.50	353.25	0.00	0.00	32.63	1.00
3	HARDEE	3375.67	21.75	88.50	116.25	323.50	0.00	0.00	40.68	1.25
9	FORREST	2979.76	24.00	92.50	80.75	276.75	0.00	0.00	34.68	1.00
15	SENHES	2792.22	26.00	92.25	110.25	332.00	0.00	0.00	27.48	1.25
6	BOSSIER	2625.52	22.25	93.00	90.75	228.75	0.00	0.00	24.70	1.00
5	COBB	2583.85	24.00	98.50	63.75	198.50	0.00	0.00	35.40	1.50
1	JUPITER	2583.85	35.75	97.00	85.00	592.25	0.00	0.00	61.45	2.50
2	HAMPTON 266A	2333.80	24.00	98.00	130.75	433.25	0.00	0.00	29.00	1.25
10	COLUMBUS	2271.29	21.50	92.00	153.75	362.75	0.00	0.00	62.53	2.00
8	TRACY	2250.45	22.00	92.25	121.00	250.00	0.00	0.00	34.46	2.00
13	WILLIAMS	2229.61	22.00	90.00	177.75	403.00	0.00	0.00	52.64	1.75
11	CLARK 63	2000.40	21.75	91.25	98.75	364.00	0.00	0.00	51.90	2.25
4	IMPROVED PELICAN	1875.37	37.75	90.75	104.25	456.75	0.00	0.00	90.87	2.75
14	CALLAND	1792.02	21.50	90.75	96.75	472.25	0.00	0.00	64.06	2.00
12	WOODWORTH	1646.16	22.00	89.00	96.25	203.50	0.00	0.00	47.73	2.50
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.08	-0.27+	0.17	-0.00	0.00	0.00	-0.43++	-0.42++
DAYS TO FLOWER	1.00	0.15	1.00	0.15	-0.11	0.31+	0.00	0.00	0.45++	0.32+
DAYS TO MATURITY	-0.27+	0.17	1.00	0.15	-0.11	0.31+	0.00	0.00	-0.09	-0.06
NODULE NUMBER 1	0.17	-0.11	-0.31+	-0.31+	1.00	0.33++	0.00	0.00	-0.03	-0.21
NODULE NUMBER 2	-0.00	0.31+	0.04	0.04	0.33++	1.00	0.00	0.00	0.41++	0.21
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEIGHT	-0.43++	0.45++	0.32+	-0.09	-0.03	0.41++	0.00	0.00	1.00	0.58++
LODGING	-0.42++	0.32+	-0.06	-0.06	-0.21	0.21	0.00	0.00	0.68++	1.00
SHATTER	-0.23	0.10	-0.17	-0.09	0.23	-0.05	0.00	0.00	0.14	0.07
HARVEST	0.10	-0.17	0.03	0.03	-0.12	-0.25	0.00	0.00	-0.30+	-0.18
PLANT	0.26+	0.49++	0.03	0.03	-0.11	0.32+	0.00	0.00	0.16	0.02
PODS PER	0.03	-0.20	0.23	0.20	0.20	0.28+	0.00	0.00	-0.18	0.00
100 SEED	-0.70++	-0.17	0.34++	-0.25+	-0.25+	-0.15	0.00	0.00	0.16	0.20
QUALITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 98

EXPERIMENT 393

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
7	DAVIS	1.00	186.75	25.03	21.75	1.00	44.3	22.5
3	HARDEE	1.00	186.75	28.10	22.75	1.00	45.6	22.8
9	FORREST	1.00	191.50	22.50	19.50	2.50	44.3	22.8
15	SEMME	1.00	188.00	24.38	22.25	1.75	45.9	22.1
6	BOSSIER	1.00	179.00	24.13	21.75	2.25	48.1	21.5
5	COBB	1.00	194.25	26.25	21.75	2.00	42.6	24.8
1	JUPITER	1.00	170.50	33.48	26.50	2.25	45.9	22.6
2	HAMPTON 266A	1.00	189.75	23.60	26.25	2.25	44.5	24.5
10	COLUMBUS	1.25	176.25	18.55	24.50	2.75	48.3	21.0
8	TRACY	1.00	198.75	20.23	23.75	2.50	47.7	20.1
13	WILLIAMS	1.00	187.25	15.70	25.50	2.25	46.1	22.9
11	CLARK 63	1.00	187.50	18.70	21.75	3.00	45.6	23.6
4	IMPROVED PELICAN	1.00	178.75	37.68	17.00	1.75	46.7	21.9
14	CALLAND	1.00	188.50	16.95	23.25	3.25	44.5	22.5
12	WOODMORTH	1.25	175.75	15.48	21.50	3.50	45.3	23.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C C R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	-0.23	0.10	0.26+	0.03	-0.70++	0.00	0.00
DAYS TO FLOWER		-0.09	-0.17	0.49++	-0.20	-0.17	0.00	0.00
DAYS TO MATURITY		-0.00	0.03	0.03	0.23	0.34++	0.00	0.00
NODULE NUMBER 1		0.23	-0.12	-0.11	0.20	-0.25+	0.00	0.00
NODULE NUMBER 2		-0.05	-0.25	0.32+	0.28+	-0.15	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.14	0.00	0.00	0.00	0.00	0.00	0.00
LDGING		0.07	-0.18	0.16	-0.18	0.16	0.00	0.00
SHATTER		1.00	-0.21	0.02	0.00	0.20	0.00	0.00
PLANTS HARVEST		-0.21	1.00	-0.24	-0.01	0.12	0.00	0.00
PODS PER PLANT		-0.24	-0.12	1.00	-0.01	0.02	0.00	0.00
100 SEED WEIGHT		-0.01	-0.01	-0.26+	1.00	-0.36++	0.00	0.00
QUALITY OF SEED		0.12	0.02	-0.36++	0.03	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 99 EXPERIMENT 395 YEAR 1975

REGION - AFRICA  
 SITE - KITANGBAO  
 LATITUDE - 9 DEG. 16 MIN. N  
 COOPERATOR - I.R.A.T.-TOGO  
 DATE PLANTED - JULY 8, 1975  
 SOIL PH 6.0  
 FERTILIZER USED (KG/HA) - P 20.0, K 20.0  
 AMOUNT OF MOISTURE - 814 MM

COUNTRY - TOGO  
 ELEVATION - 340 M  
 LONGITUDE - 0 DEG. 43 MIN. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	PLANT LODGING
1	JUPITER	3292.32	27.25	102.00	252.50	411.50	0.00	0.00	39.50	5.00
7	DAVIS	2854.74	26.25	89.00	150.50	388.00	0.00	0.00	33.50	1.75
3	HARDEE	2729.71	28.00	93.00	247.50	512.00	0.00	0.00	30.50	1.00
9	FORREST	2563.01	26.00	87.00	177.50	410.25	0.00	0.00	30.00	1.25
6	BOSSIER	2458.82	27.25	92.00	238.50	521.75	0.00	0.00	42.75	2.25
4	IMPROVED PELICAN	2396.31	31.25	87.00	195.75	425.75	0.00	0.00	44.50	2.25
5	COBB	2292.12	25.75	92.00	187.50	525.00	0.00	0.00	33.25	1.00
15	SEMMES	2292.12	24.50	90.00	184.00	413.75	0.00	0.00	22.75	1.00
2	HAMPTON 266A	2083.75	23.75	86.00	287.00	538.25	0.00	0.00	22.50	1.50
14	CALLAND	1833.70	20.00	80.00	165.25	240.25	0.00	0.00	37.00	1.25
10	COLUMBUS	1792.02	21.00	83.00	209.00	390.50	0.00	0.00	34.50	1.25
13	WILLIAMS	1521.14	20.25	73.00	217.00	346.25	0.00	0.00	34.50	1.25
8	TRACY	1396.11	22.00	77.00	223.50	256.50	0.00	0.00	29.50	1.50
12	WOODWORTH	1271.09	20.00	73.00	220.50	290.25	0.00	0.00	36.75	2.00
11	CLARK 63	1166.90	20.00	82.00	137.50	274.75	0.00	0.00	30.50	1.75
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05    ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.66++	0.77++	0.07	0.52++	0.00	0.00	0.19	0.45++
DAYS TO FLOWER	1.00	0.66++	1.00	0.73++	0.19	0.47++	0.00	0.00	0.26+	0.27+
DAYS TO MATURITY	0.77++	0.73++	1.00	0.14	0.14	0.48++	0.00	0.00	0.07	0.43++
NODULE NUMBER 1	0.07	0.19	0.14	1.00	0.15	1.00	0.00	0.00	-0.09	0.16
NODULE NUMBER 2	0.52++	0.47++	0.48++	0.15	0.00	0.00	1.00	0.00	0.08	0.05
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.19	0.26+	0.07	-0.09	0.08	0.00	0.00	1.00	0.51++
LODGING	SHATTER	0.45++	0.27+	0.43++	0.16	0.05	0.00	0.00	0.51++	1.00
PLANTS	HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	WEIGHT	0.45++	0.42++	0.23	0.01	0.18	0.00	0.00	0.14	0.19
100 SEED	QUALITY	-0.01	-0.40++	-0.00	0.03	0.37++	0.00	0.00	0.17	0.27+
QUALITY OF SEED	DISEASE I	-0.55++	-0.68++	-0.60++	-0.15	-0.45++	0.00	0.00	-0.23	-0.02
DISEASE II	DISEASE II	-0.67++	-0.74++	-0.69++	-0.10	-0.40++	0.00	0.00	-0.13	-0.18
DISEASE III	DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.26+	-0.27+
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 99

EXPERIMENT 195 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	212.50	20.22	24.50	1.50	42.6	23.5
7	DAVIS	1.00	230.50	15.13	26.25	1.75	45.8	21.7
3	HARPER	1.00	172.50	20.48	24.25	2.00	44.1	22.6
9	FORREST	1.00	216.25	19.83	21.50	1.25	42.0	22.8
6	BOSSLER	1.00	184.25	17.85	25.00	1.25	45.4	21.1
4	IMPROVED PELICAN	1.00	236.25	18.65	18.50	1.00	44.2	21.9
5	CORB	1.00	176.25	21.25	23.75	1.50	41.5	22.8
15	SEMPFS	1.00	216.75	15.10	24.50	2.25	44.9	21.7
2	HAMPTON 266A	1.00	213.00	15.88	26.25	1.75	39.6	24.1
14	CALLAND	1.00	203.00	14.28	25.25	3.25	41.6	22.3
10	COLUMBUS	1.00	178.25	14.30	24.25	2.50	43.2	21.7
13	WILLIAMS	1.00	167.00	13.33	25.25	2.50	42.2	23.0
8	TRACY	1.00	216.00	11.80	24.00	3.75	44.7	20.3
12	WOODWORTH	1.00	174.25	12.05	23.25	3.25	42.4	23.4
11	CLARK 63	1.00	115.50	19.30	24.25	2.75	42.1	23.0
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
CORRELATIONS								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.45++	0.53++	-0.01	-0.55++	-0.67++	0.00
DAYS TO FLOWER		0.00	0.42++	0.48++	-0.40++	-0.68++	-0.74++	0.00
DAYS TO MATURITY		0.00	0.23	0.58++	-0.00	-0.60++	-0.69++	0.00
NODULE NUMBER 1		0.00	0.01	0.03	0.12	-0.15	-0.10	0.00
NODULE NUMBER 2		0.00	0.18	0.37++	0.02	-0.45++	-0.40++	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.14	0.17	0.00	0.00	0.00	0.00
	LODGING	0.00	0.19	0.27+	-0.23	-0.13	-0.26+	0.00
	SHATTER	1.00	0.00	0.00	-0.02	-0.18	-0.27+	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	-0.12	-0.12	-0.12	-0.18	-0.38++	0.00
100 SEED	WEIGHT	0.00	-0.12	1.00	-0.19	-0.44++	-0.34++	0.00
QUALITY	OF SEED	0.00	-0.18	-0.19	1.00	0.22	0.22	0.00
DISEASE	I	0.00	-0.38++	-0.44++	0.22	1.00	0.66++	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 100 EXPERIMENT 479 YEAR 1975

REGION - AFRICA COUNTRY - UPPER VOLTA  
 SITE - BOBO-DIOULASSO ELEVATION - 200 M  
 LATITUDE - 11 DEG. 25 MIN. N LONGITUDE - 4 DEG. 20 MIN. W  
 COOPERATORS - B. BERNOCCHI, I. SIKORA  
 DATE PLANTED - JULY 23, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - SAND 45%, SILT 40%, CLAY 15%, PH 5.6  
 FERTILIZER USED (KG/HA) - P 36.0, K 60.0  
 AMOUNT OF MOISTURE - 496 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NUMBER 1	NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	2743.88	30.25	95.00	281.00	1181.25	1.03	4.74	43.13	1.50
5	COBB	2668.03	28.75	95.25	205.25	957.50	1.35	4.25	38.80	1.00
7	DAVIS	2625.94	28.25	92.75	245.75	606.25	1.02	3.63	39.45	2.00
2	HAMPTON 266A	2587.60	28.75	95.00	356.75	957.50	1.30	4.29	32.48	2.00
9	FORREST	2507.58	28.75	92.00	278.50	839.75	1.42	4.24	39.55	1.75
6	BOSSIER	2293.79	24.50	91.75	275.50	656.50	1.19	4.29	29.13	1.25
1	JUPITER	2244.20	31.25	100.50	432.75	665.75	1.70	2.83	76.57	2.50
15	SEMME	2107.92	30.00	94.00	208.00	515.50	0.92	3.18	27.30	1.50
13	WILLIAMS	2087.50	23.00	84.75	258.00	551.50	1.15	3.38	43.15	1.25
8	TRACY	2085.83	27.00	88.50	253.25	430.75	1.39	4.64	37.35	2.25
10	COLUMBUS	1929.55	23.50	86.75	325.50	653.25	1.71	4.00	46.00	1.00
4	IMPROVED PELICAN	1732.01	30.75	95.75	271.25	639.25	1.00	2.39	80.52	2.00
14	CALLAND	1722.01	23.00	83.25	212.25	578.25	1.20	3.45	42.63	1.50
11	CLARK 63	1708.09	23.00	85.25	264.50	508.75	1.23	3.58	40.55	1.50
12	WOODWORTH	1600.32	23.50	83.75	216.75	310.25	1.19	3.03	35.35	1.75
GRAND MEAN										
2176.02										
STANDARD ERROR OF A VARIETY MEAN										
81.00										
COEFFICIENT OF VARIATION										
7.44%										
5% LSD VARIETY MEANS (*****=NS)										
231.50										
C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD KG/HA										
1.00										
DAYS TO FLOWER										
0.46++										
DAYS TO MATURITY										
0.86++										
MODULE NUMBER 1										
0.09										
MODULE NUMBER 2										
0.66++										
MODULE WEIGHT 1										
-0.11										
MODULE WEIGHT 2										
0.50++										
PLANT HEIGHT										
-0.18										
LODGING										
0.05										
SHATTER										
0.00										
PLANTS HARVEST										
-0.02										
PODS PER PLANT										
0.60++										
100 SEED WEIGHT										
0.19										
QUALITY OF SEED										
0.13										
DISEASE I										
-0.22										
DISEASE II										
0.00										
DISEASE III										
0.00										

TABLE 100 EXPERIMENT 479 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED HEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEE	1.00	191.25	25.88	18.88	2.25	37.5	26.1
5	COBB	1.00	194.00	28.10	17.60	2.00	41.7	23.3
7	DAVIS	1.00	193.75	21.88	18.75	1.50	40.9	22.7
2	HAPTON 266A	1.00	196.00	23.98	21.88	2.75	40.0	24.1
9	FORREST	1.00	190.50	27.33	15.20	2.25	39.1	23.3
6	BOSSIER	1.00	193.00	21.35	19.23	2.25	43.1	22.6
1	JUPITER	1.00	184.00	30.10	16.85	3.25	39.6	24.5
15	SEMMES	1.00	189.25	19.68	19.63	2.00	41.4	22.2
13	WILLIAMS	1.00	193.00	15.45	20.30	1.50	40.6	23.1
8	TRACY	1.00	194.25	19.95	18.38	2.50	43.2	21.0
10	COLUMBUS	1.00	195.00	17.33	17.95	2.25	43.0	21.7
4	IMPROVED PELICAN	1.00	191.50	26.60	13.00	2.25	43.3	21.9
14	CALLAND	1.00	194.75	13.65	20.50	2.50	41.8	21.3
11	CLARK 63	1.00	191.25	15.75	18.50	2.00	41.3	23.4
12	WOODWORTH	1.00	191.25	16.25	17.83	1.50	37.1	24.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(* - PROB=.05    ** - PROB=.01)								
YIELD	KG/HA	0.00	-0.02	0.60++	0.19	0.13	-0.22	0.00
DAYS TO FLOWER		0.00	-0.19	0.70++	-0.35++	0.25	-0.28+	0.00
DAYS TO MATURITY		0.00	-0.19	0.82++	-0.28+	0.38++	-0.16	0.00
NODULE NUMBER 1		0.00	-0.04	0.26+	-0.10	0.40++	-0.02	0.00
NODULE NUMBER 2		0.00	0.11	0.52++	0.04	0.15	0.03	0.00
NODULE WEIGHT 1		0.00	0.05	0.03	-0.11	0.28+	0.05	0.00
NODULE WEIGHT 2		0.00	0.09	0.12	0.30+	0.02	-0.15	0.00
PLANT HEIGHT		0.00	-0.22	0.39++	-0.63++	0.29+	0.20	0.00
LOGGING		0.00	-0.09	0.27+	-0.18	0.37++	-0.21	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.28+	0.10	0.00	0.00	0.00
PODS PER PLANT		0.00	-0.28+	1.00	-0.45++	-0.31+	-0.15	0.00
100 SEED WEIGHT		0.00	0.10	-0.45++	1.00	0.01	0.10	0.00
QUALITY OF SEED		0.00	-0.27+	0.31+	0.01	1.00	0.06	0.00
DISEASE I		0.00	-0.04	-0.15	0.10	0.06	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 101 EXPERIMENT 454 YEAR 1975

REGION - AFRICA  
 SITE - FARAKO-BA  
 LATITUDE - 11 DEG. 6 MIN. N  
 COOPERATOR - I.R.A.T.-UPPER VOLTA  
 DATE PLANTED - JUNE 21, 1975  
 SOIL TYPE - SAND 85.5%, SILT 5.0%, CLAY 9.3%, PH 5.5  
 FERTILIZER USED (KG/HA) - N 18.0, P 45.0, K 60.0  
 AMOUNT OF MOISTURE - 690 MM

COUNTRY - UPPER VOLTA  
 ELEVATION - 405 M  
 LONGITUDE - 4 DEG. 20 MIN. W

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2479.66	59.00	120.25	19.75	208.75	0.05	1.73	55.60	0.00
7	DAVIS	2287.96	19.75	115.75	50.50	228.50	0.14	2.26	29.28	0.00
2	HAMPTON 266A	2152.51	21.00	102.00	51.25	193.75	0.11	1.57	22.98	0.00
6	BOSSIER	1964.98	21.00	103.50	27.00	198.25	0.08	1.47	21.28	0.00
14	CALLAND	1942.05	21.50	88.25	34.75	186.00	0.05	1.56	36.00	0.00
10	COLUMBUS	1923.30	20.75	89.50	60.50	211.75	0.06	1.64	39.80	0.00
4	IMPROVED PELICAN	1919.13	59.00	103.75	52.50	385.25	0.18	2.61	56.18	0.00
5	COBB	1894.13	24.50	111.75	38.00	120.25	0.07	0.99	21.78	0.00
3	HARDEE	1808.69	27.25	114.75	24.25	182.75	0.10	1.56	31.00	0.00
15	SEMME	1760.77	20.00	114.00	43.75	164.75	0.07	1.18	19.85	0.00
9	FORREST	1729.51	18.75	96.50	34.75	123.25	0.04	1.36	28.53	0.00
12	WOODWORTH	1587.82	19.75	86.25	22.50	144.00	0.03	1.01	33.45	0.00
13	WILLIAMS	1566.98	21.00	88.75	45.75	130.75	0.56	1.18	30.85	0.00
8	TRACY	1556.56	20.75	89.00	59.50	150.25	0.10	1.44	22.58	0.00
11	CLARK 63	1396.11	20.75	90.75	37.25	138.00	0.02	1.03	34.03	0.00
GRAND MEAN		1864.68	26.32	100.98	40.13	184.42	0.11	1.51	32.21	0.00
STANDARD ERROR OF A VARIETY MEAN		153.40	1.68	2.71	9.49	28.68	0.13	0.27	1.76	0.00
COEFFICIENT OF VARIATION		16.45%	12.80%	5.36%	47.27%	31.10%	235.49%	35.88%	10.93%	0.00%
5% LSD VARIETY MEANS (*****=NS)		438.45	4.81	7.73	*****	81.96	*****	0.77	5.03	0.00
C O R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.27+	0.43++	0.11	0.39++	-0.02	0.47++	0.31+	0.00
DAYS TO FLOWER	1.00	0.27+	1.00	0.39++	-0.13	0.49++	-0.01	0.37++	0.78++	0.00
DAYS TO MATURITY	0.43++	0.39++	1.00	0.21	-0.21	0.19	-0.07	0.18	0.08	0.00
NODULE NUMBER 1	0.11	-0.13	-0.21	1.00	0.21	0.21	0.21	0.22	-0.04	0.00
NODULE NUMBER 2	0.39++	0.49++	0.19	0.21	0.21	1.00	0.06	0.82++	0.53++	0.00
NODULE WEIGHT 1	-0.02	-0.01	-0.07	0.21	0.21	0.06	1.00	0.03	0.01	0.00
NODULE WEIGHT 2	0.47++	0.37++	0.18	0.22	0.22	0.82++	0.03	1.00	0.39++	0.00
PLANT HEIGHT	0.31+	0.78++	0.08	-0.04	-0.04	0.53++	0.01	0.39++	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.46++	-0.18	-0.10	0.26+	0.26+	0.05	-0.04	0.24	-0.08	0.00
PODS PER PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT	0.20	-0.31+	0.03	0.11	0.11	-0.14	0.11	-0.13	-0.31+	0.00
QUALITY OF SEED	0.10	-0.12	0.48++	-0.30+	-0.30+	-0.17	0.05	-0.22	-0.33+	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 101

EXPERIMENT 454

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	0.00	166.75	0.00	17.68	3.00	44.5	22.3
7	DAVIS	0.00	175.25	0.00	17.85	2.75	42.3	23.3
2	HAMPTON 266A	0.00	176.00	0.00	21.48	3.00	42.8	24.2
6	BOSSIER	0.00	166.50	0.00	18.30	3.25	47.6	21.1
14	CALLAND	0.00	168.00	0.00	19.73	2.25	44.0	21.8
10	COLUMBUS	0.00	183.50	0.00	17.90	1.75	43.3	22.4
4	IMPROVED PELICAN	0.00	153.00	0.00	14.30	1.50	45.3	22.7
5	COBB	0.00	177.00	0.00	20.38	3.25	40.3	25.2
3	HARDEE	0.00	148.50	0.00	16.30	2.50	44.3	24.2
15	SEMME	0.00	161.00	0.00	19.13	3.50	45.8	21.4
9	PORREST	0.00	170.75	0.00	14.48	2.00	43.4	21.9
12	WOODWORTH	0.00	181.75	0.00	17.60	2.50	41.0	23.1
13	WILLIAMS	0.00	150.50	0.00	20.45	2.50	42.2	24.8
8	TRACY	0.00	163.75	0.00	17.55	1.50	46.9	19.4
11	CLARK 63	0.00	131.00	0.00	17.50	3.00	41.9	24.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	164.88	0.00	18.04	2.55		
COEFFICIENT OF VARIATION		0.00	7.50	0.00	0.92	0.24		
5% LSD VARIETY MEANS (*****=NS)		0.00	9.10%	0.00%	10.17%	18.72%		
		0.00	21.44	0.00	2.62	0.68		
C O R R E L A T I O N S								
(+ - PROB=.05      ** - PROB=.01)								
YIELD	KG/HA	0.00	0.46**	0.00	0.20	0.10	0.00	0.00
DAYS TO	FLOWER	0.00	-0.18	0.00	-0.31+	-0.12	0.00	0.00
DAYS TO	MATURITY	0.00	-0.10	0.00	0.03	0.48**	0.00	0.00
NODULE	NUMBER 1	0.00	0.26+	0.00	0.11	-0.30+	0.00	0.00
NODULE	NUMBER 2	0.00	0.05	0.00	-0.14	-0.17	0.00	0.00
NODULE	WEIGHT 1	0.00	-0.04	0.00	0.11	0.05	0.00	0.00
NODULE	WEIGHT 2	0.00	0.24	0.00	-0.13	-0.22	0.00	0.00
PLANT	HEIGHT	0.00	-0.08	0.00	-0.31+	-0.33**	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	1.00	0.14	-0.08	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY	OF SEED	0.00	0.14	0.00	1.00	0.36**	0.00	0.00
DISEASE	I	0.00	-0.08	0.00	0.36**	1.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00
								1.00



TABLE 102 EXPERIMENT 443 YEAR 1975

REGION - AFRICA COUNTRY - UPPER VOLTA  
 SITE - SARIA ELEVATION - 300 M  
 LATITUDE - 16 DEG. 12 MIN. N LONGITUDE - 2 DEG. 9 MIN. W  
 COOPERATOR - A. DJIGMA  
 DATE PLANTED - JULY 17, 1975 DATE HARVESTED - OCTOBER, 1975  
 FERTILIZER USED (KG/HA) - P 8.0  
 AMOUNT OF MOISTURE - 500 MM  
 LOCAL VARIETIES - BLACK MOTTLED JAVA, G.38=ILINI

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
10	COLUMBUS	1229.41	29.75	76.00	0.00	0.00	0.00	0.00	35.90	0.00
12	WOODWORTH	1158.56	29.75	72.00	0.00	0.00	0.00	0.00	32.23	0.00
6	BOSSIER	1141.89	31.50	76.00	0.00	0.00	0.00	0.00	21.15	0.00
13	WILLIAMS	1137.73	30.00	74.00	0.00	0.00	0.00	0.00	35.55	0.00
5	COBB	1050.21	33.00	76.00	0.00	0.00	0.00	0.00	23.30	0.00
9	FORREST	975.19	33.00	76.00	0.00	0.00	0.00	0.00	25.95	0.00
15	SEMME	971.03	33.00	72.00	0.00	0.00	0.00	0.00	16.73	0.00
11	CLARK 63	946.02	30.00	76.00	0.00	0.00	0.00	0.00	34.65	0.00
8	TRACY	941.85	32.25	72.00	0.00	0.00	0.00	0.00	19.70	0.00
2	HAMPTON 266A	933.52	33.00	76.00	0.00	0.00	0.00	0.00	19.00	0.00
7	DAVIS	908.51	34.00	81.00	0.00	0.00	0.00	0.00	21.63	0.00
14	CALLAND	862.67	28.75	74.00	0.00	0.00	0.00	0.00	36.38	0.00
4	G.38=ILINI	658.46	41.00	83.00	0.00	0.00	0.00	0.00	53.88	0.00
1	JUPITER	587.62	40.00	83.00	0.00	0.00	0.00	0.00	55.45	0.00
3	BLACK MOTTLED JAVA	525.10	47.00	83.00	0.00	0.00	0.00	0.00	47.38	0.00
	GRAND MEAN	935.19	33.73	76.67	0.00	0.00	0.00	0.00	31.92	0.00
	STANDARD ERROR OF A VARIETY MEAN	83.24	0.27	0.00	0.00	0.00	0.00	0.00	2.22	0.00
	COEFFICIENT OF VARIATION	17.80%	1.63%	0.00%	0.00%	0.00%	0.00%	0.00%	13.93%	0.00%
	5% LSD VARIETY MEANS (*****=NS)	237.91	0.78	0.00	0.00	0.00	0.00	0.00	6.35	0.00
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.68++	-0.60++	0.00	0.00	0.00	0.00	-0.42++	0.00
DAYS TO FLOWER		-0.68++	1.00	0.81++	0.00	0.00	0.00	0.00	0.56++	0.00
DAYS TO MATURITY		-0.60++	0.81++	1.00	0.00	0.00	0.00	0.00	0.63++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.42++	0.56++	0.63++	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.41++	-0.66++	-0.68++	0.00	0.00	0.00	0.00	-0.55++	0.00
PODS PER PLANT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.57++	-0.86++	-0.76++	0.00	0.00	0.00	0.00	-0.55++	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 102 EXPERIMENT 443 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
10	COLUMBUS	0.00	123.50	0.00	15.30	0.00	43.8	21.2
12	WOODWORTH	0.00	125.25	0.00	15.95	0.00	42.0	24.1
6	BOSSIER	0.00	124.50	0.00	14.18	0.00	40.8	25.7
13	WILLIAMS	0.00	122.00	0.00	17.35	0.00	43.1	23.5
5	CORB	0.00	126.75	0.00	13.90	0.00	47.2	20.6
9	FORREST	0.00	124.50	0.00	11.30	0.00	43.3	20.9
15	SEMPES	0.00	125.75	0.00	13.90	0.00	44.1	21.9
11	CLARK 63	0.00	120.00	0.00	16.25	0.00	41.9	25.0
8	TRACY	0.00	127.25	0.00	17.13	0.00	44.1	20.8
2	HAMPTON 266A	0.00	128.25	0.00	14.70	0.00	44.4	22.3
7	DAVIS	0.00	114.25	0.00	14.05	0.00	43.9	21.8
14	CALLAND	0.00	126.00	0.00	17.50	0.00	44.0	20.6
4	G. 38=ILINI	0.00	93.25	0.00	6.90	0.00	42.2	18.8
1	JUPITER	0.00	117.25	0.00	8.70	0.00	44.5	19.5
3	BLACK MOTTLED JAVA	0.00	100.75	0.00	5.45	0.00	--	--
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ -- PROB=.05 ++ -- PROB=.01)								
YIELD	KG/HA	0.00	0.41++	0.00	0.57++	0.00	0.00	0.00
DAYS TO FLOWER		0.00	-0.66++	0.00	-0.86++	0.00	0.00	0.00
DAYS TO MATURITY		0.00	-0.68++	0.00	-0.76++	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	-0.55++	0.00	-0.55++	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.00	0.54++	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	1.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.54++	0.00	1.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 103 EXPERIMENT 638 YEAR 1975

REGION - AFRICA COUNTRY - ZAMBIA  
 SITE - MAGOYE ELEVATION - 1067 M  
 LATITUDE - 16 DEG. 8 MIN. S LONGITUDE - 27 DEG. 38 MIN. E  
 COOPERATORS - A.L. CHAMPANERI, A.J. PRIOR  
 DATE PLANTED - DECEMBER 9, 1975 DATE HARVESTED - MARCH, 1976  
 SOIL TYPE - SAND 83%, SILT 6%, CLAY 11%, PH 5.3  
 FERTILIZER USED - P 31.2  
 AMOUNT OF MOISTURE - 742 MM  
 LOCAL VARIETY - GEDULD

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
3	HARDEE	4261.27	56.00	115.00	349.50	898.75	3.08	8.87	72.02	1.00
1	JUPITER	4200.84	77.00	134.00	383.00	544.00	3.80	5.68	121.28	3.75
10	COLUMBUS	3850.77	35.00	84.00	184.50	506.50	1.53	5.25	69.15	2.25
5	FCRREST	3823.68	43.00	84.00	145.75	545.50	2.03	5.80	58.33	1.00
15	GEDULD	3711.16	49.00	98.00	365.00	843.25	3.83	7.05	91.77	1.75
2	HAMPTON 266A	3311.08	40.00	84.00	259.50	676.25	2.28	6.12	39.28	1.25
4	IMPROVED PELICAN	3248.57	38.50	84.00	155.50	339.25	1.78	4.78	37.90	1.00
7	DAVIS	3244.40	49.00	98.00	197.50	601.50	2.80	4.98	69.43	1.00
14	CAILLAN	3090.20	35.00	81.00	147.25	478.25	1.53	6.25	57.95	1.25
6	BOSSIER	3073.53	37.00	84.00	165.25	482.50	2.23	5.70	37.28	1.00
13	WILLIAMS	3015.19	35.00	81.00	259.75	472.25	1.33	5.00	52.60	1.00
8	TRACY	2548.43	36.50	81.00	213.75	267.00	2.25	4.75	38.53	1.00
12	WOODWORTH	2440.07	35.00	81.00	149.50	390.50	1.20	5.25	46.58	1.00
5	COBB	2240.13	43.00	98.00	87.25	344.50	0.88	3.95	48.35	1.00
11	CLARK 63	1294.01	38.50	84.00	144.50	345.50	0.80	4.95	41.40	1.50
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.50++	0.47++	0.53++	0.57++	0.60++	0.43++	0.60++	0.35++
DAYS TO FLOWER	0.50++	1.00	0.97++	0.97++	0.54++	0.32++	0.62++	0.23	0.83++	0.62++
DAYS TO MATURITY	0.47++	0.97++	1.00	0.52++	0.52++	0.35++	0.58++	0.27+	0.81++	0.58++
NODULE NUMBER 1	0.53++	0.54++	0.52++	1.00	0.61++	0.82++	0.49++	0.49++	0.54++	0.45++
NODULE NUMBER 2	0.57++	0.32++	0.35++	0.61++	1.00	0.63++	0.79++	0.41++	0.41++	0.09
NODULE WEIGHT 1	0.60++	0.62++	0.58++	0.82++	0.63++	1.00	0.49++	0.59++	0.40++	0.40++
NODULE WEIGHT 2	0.43++	0.23	0.27+	0.49++	0.79++	0.49++	1.00	0.28+	0.28+	0.05
PLANT HEIGHT	0.60++	0.83++	0.81++	0.54++	0.41++	0.59++	0.49++	1.00	0.72++	0.72++
ICDGING	0.35++	0.62++	0.58++	0.45++	0.09	0.40++	0.35	0.28+	1.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.71++	0.36	0.31	0.21	0.26+	0.35++	0.17	0.17	0.17	0.02
100 SEED WEIGHT	-0.33+	0.33+	0.34++	-0.01	0.05	-0.03	0.07	0.14	0.14	0.14
QUALITY OF SEED	0.10	-0.10	-0.06	0.24	0.02	0.28+	0.04	-0.09	-0.09	-0.13
	-0.13	-0.10	-0.10	-0.20	0.11	-0.14	-0.14	-0.28+	-0.28+	-0.34++

TABLE 103

EXPERIMENT 636

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEE	1.00	165.75	41.85	22.00	1.75	45.2	20.8
1	JUPITER	1.00	171.50	38.95	21.50	1.00	41.3	22.0
10	COLUMBUS	1.00	192.50	23.53	22.00	1.00	47.2	21.3
9	FORREST	1.00	195.25	33.10	20.00	2.50	43.8	20.6
15	GEULD	1.00	172.75	32.58	22.75	2.75	40.9	24.4
2	HAMPTON 266A	1.00	192.25	27.78	24.50	3.50	43.7	22.8
4	IMPROVED PELICAN	1.00	191.50	22.70	22.50	3.00	--	--
7	DAVIS	1.00	190.75	37.65	24.00	4.00	43.7	21.1
14	CALLAND	1.00	187.25	19.40	22.25	1.25	44.6	20.6
6	BOSSIER	1.00	186.00	25.03	22.75	3.25	46.4	21.5
13	WILLIAMS	1.00	182.75	20.68	23.75	2.00	45.3	22.8
8	TRACY	1.00	178.00	18.65	23.00	1.25	47.3	19.1
12	WOODWORTH	1.00	126.50	27.23	20.25	1.50	43.3	21.2
5	COEB	1.00	112.25	39.75	22.00	3.75	41.7	21.9
11	CLARK 63	1.00	24.50	69.70	20.75	2.25	43.0	22.1
GRAND MEAN								
		1.00	164.63	31.90	22.27	2.32		
STANDARD ERROR OF A VARIETY MEAN								
		0.00	7.31	2.18	0.41	0.25		
COEFFICIENT OF VARIATION								
		0.00%	8.88%	13.64%	3.72%	21.69%		
5% ISI VARIETY MEANS (*****=NS)								
		0.00	20.86	6.21	1.18	0.72		
C O R R E L A T I O N S								
			(+ - PROB=.05		+ + - PROB=.01)			
YIELD	KG/HA	0.00	0.71++	-0.33+	0.10	-0.13		
DAYS TO	FLOWER	0.00	0.06	0.33+	-0.10	-0.10		
DAYS TO	MATURITY	0.00	0.01	0.34++	-0.06	-0.10		
NODULE	NUMBER 1	0.00	0.21	-0.01	0.24	-0.20		
NODULE	NUMBER 2	0.00	0.26+	0.05	0.22	0.10		
NODULE	WEIGHT 1	0.00	0.35++	-0.03	0.28+	0.00		
NODULE	WEIGHT 2	0.00	0.17	0.07	0.04	-0.14		
PLANT	HEIGHT	0.00	0.17	0.14	-0.09	-0.28+		
LODGING		0.00	-0.02	0.14	-0.13	-0.34++		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	-0.76++	0.37++	-0.03		
PODS PER	PLANT	0.00	-0.76++	1.00	-0.31+	0.17		
100 SEED	WEIGHT	0.00	0.37++	-0.31+	1.00	0.37++		
QUALITY	OF SEED	0.00	-0.03	0.17	0.37++	1.00		

TABLE 104

EXPERIMENT 639

YEAR 1975

REGION - AFRICA  
 SITE - MUFULIRA  
 LATITUDE - 12 DEG. 37 MIN. S  
 COORDINATES - A.J. PRIOR, A.A.V. SAMUELZY  
 DATE PLANTED - DECEMBER 29, 1975  
 SOIL TYPE - SANDY LOAM  
 FERTILIZER USED - P 31.2  
 AMOUNT OF MOISTURE - 1005 MM  
 LOCAL VARIETY - GIDULU

COUNTRY - ZAMBIA  
 ELEVATION - 1249 M  
 LONGITUDE - 28 DEG. 9 MIN. E  
 DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	PLANT HEIGHT	LOGGING
7	DAVIS	2725.71	49.00	144.50	135.75	243.25	2.03	4.50	48.25	1.00
8	HARDEE	2542.17	51.00	133.25	255.25	343.00	2.58	4.41	44.50	1.25
9	FORREST	2538.83	43.00	115.00	117.25	271.00	0.72	2.45	44.25	1.00
10	COLUMBUS	2456.32	37.00	104.75	229.00	269.25	1.03	2.93	45.75	1.00
11	JUPITER	2317.13	73.00	145.00	266.25	477.00	1.98	6.69	50.50	1.75
2	HAMPTON 266A	2300.46	41.50	127.50	221.00	281.25	1.08	2.69	39.50	1.00
4	IMPROVED PELICAN	2133.76	40.00	112.25	108.50	180.75	0.61	2.14	38.25	1.00
14	GEDULD	2137.91	54.00	134.50	333.25	395.75	3.27	5.05	63.50	1.00
13	CALLAND	1994.23	35.00	112.25	143.25	220.25	1.16	2.96	42.75	1.00
6	BOSSIER	1707.86	41.00	141.50	114.75	236.75	1.17	2.98	38.25	1.00
5	COBE	1637.83	45.00	150.50	91.75	231.25	0.80	2.61	37.25	1.00
8	TRACY	1575.31	41.00	95.00	138.00	166.75	0.78	2.61	40.75	1.00
12	WILLIAMS	1358.60	35.00	99.00	183.75	231.75	1.26	2.43	39.00	1.00
11	WOODWORTH	1046.04	35.00	96.25	145.00	180.50	0.74	1.72	36.50	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROB=0.05 ** - PROB=0.01)										
YIELD	KG/HA	1.00	0.34**	0.35**	0.25	0.37**	0.25	0.43**	0.34**	0.17
DAYS TO FLOWER	0.34**	1.00	0.66**	0.66**	0.44**	0.64**	0.55**	0.77**	0.30*	0.51**
DAYS TO MATURITY	0.35**	0.66**	1.00	0.66**	0.12	0.38**	0.41**	0.49**	0.17	0.25
NCNULE NUMBER 1	0.25	0.44**	0.12	0.12	1.00	0.69**	0.73**	0.58**	0.42**	0.14
NCNULE NUMBER 2	0.37**	0.64**	0.38**	0.38**	0.69**	1.00	0.59**	0.76**	0.45**	0.29*
NCNULE WEIGHT 1	0.25	0.55**	0.41**	0.41**	0.73**	0.59**	1.00	0.69**	0.33*	0.15
NCNULE WEIGHT 2	0.43**	0.77**	0.49**	0.49**	0.58**	0.76**	0.69**	1.00	0.52**	0.27*
PLANT HEIGHT	0.34**	0.30*	0.17	0.17	0.42**	0.45**	0.33*	0.52**	1.00	-0.40**
LOGGING	0.17	0.51**	0.25	0.25	0.14	0.29*	0.15	0.27*	-0.40**	1.00
SHATTER	-0.06	0.29*	0.71**	0.71**	-0.05	0.11	0.12	0.11	0.07	-0.08
HARVEST	0.46**	0.34	-0.31	-0.31	0.22	0.38	0.28	0.16	0.30*	-0.16
PODS PER PLANT	0.17	0.20	0.26	0.26	0.05	0.13	0.05	0.16	-0.16	-0.34**
100 SEED WEIGHT	-0.02	-0.17	0.09	0.09	0.15	-0.13	0.15	-0.10	-0.15	-0.11
QUALITY OF SEED	-0.04	0.16	0.22	0.22	0.07	0.17	0.21	0.16	0.05	0.06

TABLE 104 EXPERIMENT 639 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
7	DAVIS	1.75	260.00	12.55	21.55	2.00	45.4	20.5
8	HARDEE	1.50	199.25	15.98	16.70	1.00	46.8	19.0
9	FOREST	1.00	232.50	9.15	16.43	1.50	44.0	20.8
10	COLUMBUS	1.00	206.25	12.45	20.48	1.25	46.7	19.8
1	JUPITER	2.00	190.25	13.00	18.63	2.50	47.1	18.4
2	HAMPTON 266A	1.75	235.50	11.85	21.93	2.50	46.6	21.5
4	IMPROVED PELICAN	1.00	240.75	10.55	18.85	2.00	--	--
14	GEDULD	1.50	252.00	8.17	21.38	3.25	44.7	22.0
13	CALLAND	1.00	206.00	9.10	23.48	3.75	46.9	19.9
6	BOSSIER	2.50	202.25	9.50	20.40	1.75	48.2	19.1
5	COPE	4.00	130.50	15.10	19.50	2.00	45.2	22.4
8	TRACY	1.00	156.00	10.25	19.23	1.50	47.4	18.0
12	WILLIAMS	1.00	230.50	10.33	20.25	1.75	45.6	22.1
11	WOODWORTH	1.00	158.25	10.88	18.65	1.25	45.3	20.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****=NS)								
C C R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.06	0.46++	0.17	-0.02	-0.04		
DAYS TO FLOWER		0.29+	0.34	0.20	-0.17	0.16		
DAYS TO MATURITY		0.71++	-0.01	0.26	0.09	0.22		
NODULE NUMBER 1		-0.35	0.22	0.35	0.15	0.07		
NODULE NUMBER 2		0.11	0.08	0.13	-0.13	0.07		
NODULE WEIGHT 1		0.12	0.28+	0.05	0.15	0.21		
NODULE WEIGHT 2		0.11	0.16	0.16	-0.10	0.16		
PLANT	HEIGHT	0.07	0.30+	-0.16	-0.15	0.05		
LODGING		-0.38	-0.16	0.34++	-0.11	0.06		
SHATTER		1.00	-0.34+	0.18	0.15	0.07		
PLANTS	HARVEST	-0.34+	1.00	-0.26	0.21	0.15		
PODS PER	PLANT	0.18	-0.26	1.00	-0.18	-0.15		
100 SEED	WEIGHT	0.15	0.21	-0.18	1.00	0.48++		
QUALITY	OF SEED	0.07	0.15	-0.15	0.48++	1.00		



TABLE 105 EXPERIMENT 309 YEAR 1975

REGION - ASIA  
 SITE - HERAT  
 COUNTRY - AFGHANISTAN  
 LATITUDE - 34 DEG. N  
 LONGITUDE - 62 DEG. E  
 COOPERATOR - M. AKDEN

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
9	PERREST	1344.85	45.00	131.00	0.00	0.00	0.00	0.00	0.00	0.00	52.50	1.00
13	WILLIAMS	1060.84	40.00	111.00	0.00	0.00	0.00	0.00	0.00	0.00	36.25	1.00
11	CLARK 63	931.64	39.00	110.00	0.00	0.00	0.00	0.00	0.00	0.00	34.25	1.00
14	CALIANC	922.48	39.00	109.00	0.00	0.00	0.00	0.00	0.00	0.00	43.75	1.00
5	COBB	518.73	36.00	67.00	0.00	0.00	0.00	0.00	0.00	0.00	37.50	1.00
7	DAVIS	896.14	36.00	91.00	0.00	0.00	0.00	0.00	0.00	0.00	27.00	1.00
12	WOODWORTH	867.97	40.00	68.50	0.00	0.00	0.00	0.00	0.00	0.00	38.75	1.00
8	TRACY	822.71	37.00	92.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	1.00
3	HARDEE	819.41	31.00	94.25	0.00	0.00	0.00	0.00	0.00	0.00	31.00	1.00
15	SEMMES	819.33	39.00	107.00	0.00	0.00	0.00	0.00	0.00	0.00	35.75	1.00
10	COLUMBUS	759.74	45.00	117.00	0.00	0.00	0.00	0.00	0.00	0.00	45.00	1.00
1	JUPITER	676.59	30.00	68.00	0.00	0.00	0.00	0.00	0.00	0.00	29.00	1.00
2	HAMPTON 266A	610.54	35.00	73.00	0.00	0.00	0.00	0.00	0.00	0.00	34.25	1.00
6	BOSSIER	401.33	35.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00	37.00	1.00
4	IMPROVED PELICAN	321.94	32.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00	34.25	1.00
	GRAND MEAN	811.62	37.27	94.58	0.00	0.00	0.00	0.00	0.00	0.00	36.28	1.00
	STANDARD ERROR OF A VARIETY MEAN	56.94	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.00
	COEFFICIENT OF VARIATION	14.03%	0.00%	0.73%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.59%	0.00%
5	ISI VARIETY MEANS (*****=NS)	162.50	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	4.45	0.00
CORRELATIONS												
	YIELD	1.00	0.57++	0.45++	0.00	0.00	0.00	0.00	0.00	0.00	0.37++	0.00
	DAYS TO FLOWER	0.57++	1.00	0.67++	0.00	0.00	0.00	0.00	0.00	0.00	0.70++	0.00
	DAYS TO MATURITY	0.45++	0.67++	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52++	0.00
	NODULE NUMBER 1	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	PLANT HEIGHT	0.37++	0.70++	0.52++	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
	LOGGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SHATTER	0.09	-0.29+	-0.23	0.00	0.00	0.00	0.00	0.00	0.00	-0.26+	0.00
	HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PODS PER PLANT	0.46++	0.43++	0.44++	0.00	0.00	0.00	0.00	0.00	0.00	0.61++	0.00
	100 SEED WEIGHT	-0.02	-0.23	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	-0.20	0.00
	QUALITY CF SEED	0.15	0.25	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
9	FORREST	2.00	0.00	140.75	9.35	2.50
10	WILLIAMS	2.00	0.00	29.50	10.85	2.50
11	CLARK 63	2.00	0.00	25.00	12.55	4.00
14	CALLAND	2.00	0.00	30.00	11.60	4.00
5	COBB	2.75	0.00	30.00	17.93	2.25
7	DAVIS	2.75	0.00	28.75	9.35	4.00
12	WOODWORTH	2.00	0.00	29.75	10.33	4.00
8	TRACY	2.00	0.00	37.75	17.58	2.50
3	HARDIE	2.75	0.00	32.50	10.15	2.25
15	STIMES	2.00	0.00	26.25	11.88	4.00
10	CCLENDUS	2.00	0.00	34.25	9.60	4.00
1	JUPITER	2.00	0.00	26.75	12.95	4.00
2	HAMPTON 266A	2.00	0.00	49.25	8.25	2.25
6	BOSSIER	2.00	0.00	32.50	9.35	2.50
4	IMPROVED PELICAN	2.00	0.00	34.50	11.50	2.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		2.15	0.00	38.70	10.61	3.13
COEFFICIENT OF VARIATION		0.11	0.00	4.87	0.22	0.16
5% ISI VARIETY MEANS (*****=NS)		10.65%	0.00%	25.18%	4.15%	9.93%
		0.33	0.00	13.91	0.63	0.44
C O R R E L A T I O N S						
		(+ - PROB=.05			++ - PROB=.01)	
YIELD KG/HA		0.09	0.00	0.46++	-0.02	0.15
DAYS TO FLOWER		-0.29+	0.00	0.43++	-0.23	0.25
DAYS TO MATURITY		-0.23	0.00	0.44++	-0.03	0.10
NODE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		-0.26+	0.00	0.61++	-0.20	0.02
LOGGING		0.00	0.00	0.00	0.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	0.00	-0.10	-0.17	-0.12
PODS PER PLANT		-0.10	0.00	1.00	-0.36++	-0.30+
100 SEED WEIGHT		-0.17	0.00	-0.36++	1.00	0.35++
QUALITY OF SEED		-0.12	0.00	-0.30+	0.35++	1.00

TABLE 106 EXPERIMENT 402 YEAR 1975

REGION - ASIA  
SITE - KUNDUZE  
LATITUDE - 37 DEG. N  
COORDINATES - MEHRABUDDIN NAIKAL, HAFIZULLAH BATASH

COUNTRY - AFGHANISTAN  
LONGITUDE - 69 DEG. E

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TC FLOWER	DAYS TC MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	CALLAND	3001.43	0.00	0.00	2.25	4.25	0.00	0.00	76.25	1.00
15	HARDEE	2973.09	0.00	0.00	1.75	5.00	0.00	0.00	83.75	1.00
16	BESSIER	2443.82	0.00	0.00	4.25	6.25	0.00	0.00	66.75	1.25
17	TRACY	2380.89	0.00	0.00	1.50	6.75	0.00	0.00	61.00	1.00
18	SEMME	2365.06	0.00	0.00	1.25	0.00	0.00	0.00	71.25	1.00
19	FORREST	2359.22	0.00	0.00	0.75	1.50	0.00	0.00	76.25	2.25
11	WILLIAMS	2277.12	0.00	0.00	10.50	2.50	0.00	0.00	72.75	1.00
10	CLARK 63	2130.84	0.00	0.00	1.50	11.00	0.00	0.00	66.25	1.00
12	COLUMBUS	2105.84	0.00	0.00	9.50	8.75	0.00	0.00	76.00	1.00
7	WOODWORTH	1700.34	0.00	0.00	3.00	6.25	0.00	0.00	64.00	1.00
1	DAVIS	1696.59	0.00	0.00	9.75	4.00	0.00	0.00	65.75	1.00
1	JUPITER	1672.42	0.00	0.00	0.25	1.25	0.00	0.00	55.25	1.00
2	HAMPTON 266A	1640.33	0.00	0.00	5.25	20.75	0.00	0.00	44.75	1.00
3	CCEB	1563.44	0.00	0.00	1.25	1.25	0.00	0.00	72.25	1.00
4	IMPROVED PELICAN	996.45	0.00	0.00	0.75	1.75	0.00	0.00	52.75	1.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2087.13	0.00	0.00	3.57	5.42	0.00	0.00	67.00	1.12
COEFFICIENT OF VARIATION		87.41	0.00	0.00	1.79	1.80	0.00	0.00	1.66	0.25
5% ISI VARIETY MEANS (*****=NS)		249.48	0.00	0.00	100.34%	66.43%	0.00%	0.00%	4.95%	44.99%
CORRELATIONS										
(+ - PROE=-.05 ** - PROB=-.01)										
YIELD	KG/HA	1.00	0.00	0.00	0.00	-0.05	0.00	0.00	0.66**	0.02
DAYS TC FLOWER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	-0.07	0.00	0.00	0.11	-0.09
NODULE NUMBER 2	-0.05	0.00	0.00	0.00	-0.07	1.00	0.00	0.00	-0.33**	-0.15
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.66**	0.00	0.00	0.00	0.11	-0.33**	0.00	0.00	1.00	0.08
LODGING	0.02	0.00	0.00	0.00	-0.09	-0.15	0.00	0.00	0.08	1.00
SHATTER	-0.01	0.00	0.00	0.00	0.01	-0.25	0.00	0.00	0.09	-0.06
HARVEST	0.63**	0.00	0.00	0.00	-0.24	-0.23	0.00	0.00	0.33**	0.07
PODS PER PLANT	-0.29*	0.00	0.00	0.00	0.06	0.11	0.00	0.00	0.05	0.19
100 SEED WEIGHT	0.35**	0.00	0.00	0.00	0.25	-0.17	0.00	0.00	0.27*	-0.24
QUALITY OF SEED	0.13	0.00	0.00	0.00	-0.15	-0.16	0.00	0.00	0.07	0.53**

TABLE 106 EXPERIMENT 402 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	CAILAND	1.75	80.00	31.50	21.00	2.00
3	HARDEE	1.25	107.00	42.50	12.93	2.00
6	BCSSIER	1.50	74.00	72.00	13.00	2.00
8	TRACY	1.25	103.50	44.25	14.25	2.00
15	SEMMES	2.75	143.75	21.25	18.00	2.00
5	FORREST	1.25	95.00	71.00	11.90	2.50
13	WILLIAMS	2.25	84.25	35.50	19.03	2.00
11	CLARK 63	1.50	72.00	56.50	15.00	2.00
10	COLUMBUS	1.50	55.00	69.25	15.23	1.75
12	WODWORTH	2.00	75.75	48.75	14.23	2.00
7	DAVIS	1.00	57.50	52.25	17.00	2.00
1	JUPITER	1.25	87.25	31.75	15.00	2.00
2	HAMPTON 266A	1.25	54.25	54.50	13.00	2.00
5	CCBB	1.50	46.75	88.00	13.50	2.00
4	IMPROVED PELICAN	2.00	37.75	54.75	12.43	2.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.60	78.25	51.58	15.03	2.02
COEFFICIENT OF VARIATION		0.24	6.63	3.69	0.18	0.10
5% ISI VARIETY MEANS (*****=NS)		29.67%	16.94%	14.29%	2.34%	9.98%
		0.68	18.91	10.52	0.50	0.29
C C R E L A T I O N S						
		(+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	-0.01	0.63++	-0.29+	0.35++	0.13
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	0.00	0.00	0.00
NCDULE NUMBER 1		0.01	-0.24	0.06	0.25	-0.15
NCDULE NUMBER 2		-0.25	-0.23	0.11	-0.17	-0.16
NCDULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.09	0.33++	0.05	0.27+	0.07
	LCDDING	-0.06	0.07	0.19	-0.24	0.53++
SHATTER		1.00	0.20	-0.31+	0.32+	-0.07
PLANTS	HARVEST	0.20	1.00	-0.59++	0.23	0.16
PODS PER PLANT		-0.31+	-0.59++	1.00	-0.57++	0.03
100 SEED WEIGHT		0.32+	0.23	-0.57++	1.00	-0.18
QUALITY OF SEED		-0.07	0.16	0.03	-0.18	1.00

TABLE 107 EXPERIMENT 407 YEAR 1975

REGION - ASIA  
 SITE - MAZAF-1-SHARIF  
 LATITUDE - 37 DEG. N  
 CCOOPERATOR - MOHAMMAD AZIM BAKHTERWAL

COUNTRY - AFGHANISTAN  
 LONGITUDE - 67 DEG. E

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NUMBER 1	NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	CALLAND	2971.84	51.00	103.00	0.00	0.00	0.17	0.36	78.75	1.00
11	WCCDORTH	2683.04	47.00	101.00	0.00	0.00	0.25	0.30	77.25	1.00
1	TRACY	2472.99	65.00	131.00	0.00	0.00	0.12	0.65	83.75	1.00
10	CLARK 63	2452.57	48.00	110.00	0.00	0.00	0.32	0.21	76.25	1.00
8	FORREST	2374.64	54.00	126.00	0.00	0.00	0.10	0.33	67.75	1.00
6	DAVIS	2248.78	67.00	131.00	0.00	0.00	0.46	0.39	83.00	1.00
5	BESSIER	2222.11	68.00	134.00	0.00	0.00	0.15	0.28	75.25	1.00
9	COLUMBUS	2151.26	48.00	113.00	0.00	0.00	0.25	0.32	85.25	1.00
12	WILLIAMS	2067.50	50.00	102.00	0.00	0.00	0.07	0.72	88.75	1.00
13	IMPROVED PELICAN	1903.30	85.00	153.00	0.00	0.00	0.21	0.31	131.75	4.00
14	SENNES	1665.50	74.00	134.00	0.00	0.00	0.24	0.50	77.00	1.00
1	HAMPTON 266A	1614.07	69.00	134.00	0.00	0.00	0.28	0.93	72.25	2.00
4	CCBB	1456.96	68.00	134.00	0.00	0.00	0.14	0.43	87.50	1.00
2	HARDEE	708.06	85.00	148.00	0.00	0.00	0.30	0.31	102.25	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSI VARIETY MEANS (*****=NS)										
CORRELATION COEFFICIENTS (+ - PROE=.05 ** - EFCB=.01)										
YIELD	KG/HA	1.00	-0.52**	-0.49**	0.00	0.00	-0.16	0.03	-0.22	-0.25
DAYS TO FLOWER	1.00	1.00	0.95**	0.95**	0.00	0.00	0.08	0.04	0.49**	0.62**
DAYS TO MATURITY	-0.49**	-0.49**	1.00	1.00	0.00	0.00	0.07	0.01	0.43**	0.59**
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	-0.16	0.08	0.07	0.07	0.00	0.00	1.00	0.02	-0.03	0.11
NODULE WEIGHT 2	0.03	0.04	0.01	0.01	0.00	0.00	0.02	1.00	-0.09	-0.02
PLANT	-0.22	0.49**	0.43**	0.43**	0.00	0.00	-0.09	-0.09	1.00	0.69**
LODGING	-0.25	0.62**	0.59**	0.59**	0.00	0.00	0.11	-0.02	0.69**	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	-0.48**	0.92**	0.92**	0.98**	0.00	0.00	0.00	0.00	0.00	0.00
POES PER PLANT	0.31	-0.72**	-0.54**	-0.54**	0.00	0.00	-0.11	-0.06	-0.39**	-0.53**
100 SEED WEIGHT	0.50**	-0.69**	-0.75**	-0.75**	0.00	0.00	-0.06	-0.11	-0.52**	-0.62**
QUALITY OF SEED	-0.35**	0.69**	0.71**	0.71**	0.00	0.00	0.03	-0.08	0.44**	0.63**



TABLE 107 EXPERIMENT 407 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
13	CALLAND	1.00	115.00	43.25	17.50	1.00
11	WOODWORTH	1.00	112.00	53.25	13.95	1.00
7	TRACY	1.00	139.00	40.50	15.43	2.00
10	CLARK 63	1.00	120.00	43.25	14.80	3.00
8	FORREST	1.00	136.00	70.25	12.60	2.00
6	DAVIS	1.00	141.00	34.75	14.95	1.00
5	BOSSIER	1.00	148.00	38.75	12.38	2.00
9	COLUMBUS	1.00	123.00	70.75	15.20	1.00
12	WILLIAMS	1.00	113.00	44.50	16.33	1.00
3	IMPROVED PELICAN	1.00	159.00	25.50	9.22	4.00
14	SEWES	1.00	148.00	32.25	14.80	3.00
1	HAMPTON 266A	1.00	148.00	42.50	13.38	2.00
4	COBB	1.00	148.00	34.75	11.90	2.00
2	HARLEE	1.00	151.00	26.25	9.63	3.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	135.79	42.89	13.75	2.00
COEFFICIENT OF VARIATION		0.00	0.00	2.76	0.40	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00%	0.00%	12.88%	5.84%	0.00%
		0.00	0.00	7.90	1.15	0.00
C C R E L A T I O N S (+ ~ PROB=.05 ++ ~ PROB=.01)						
YIELD KG/HA						
DAYS TO FLOWER	0.00	-0.48++	0.31+	0.50++	-0.35++	
DAYS TO MATURITY	0.00	0.92++	-0.72++	-0.69++	0.69++	
NODULE NUMBER 1	0.00	0.98++	-0.54++	-0.75++	0.71++	
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	
NODULE WEIGHT 2	0.00	0.05	-0.11	-0.06	0.03	
PLANT HEIGHT	0.00	0.04	-0.06	0.11	-0.38	
LODGING	0.00	0.34+	-0.39++	-0.52++	0.44++	
SHATTER	1.00	0.53++	-0.39++	-0.62++	0.63++	
PLANTS HARVEST	0.00	0.00	0.00	0.00	0.00	
PODS PER PLANT	0.00	1.00	-0.53++	-0.70++	0.66++	
100 SEED WEIGHT	0.00	-0.53++	1.00	0.32+	-0.51++	
QUALITY OF SEED	0.00	-0.70++	0.32+	1.00	-0.65++	
		0.66++	-0.51++	-0.65++	1.00	

TABLE 108 EXPERIMENT 653

YEAR 1975

REGION - ASIA  
 SITE - JOYDEVPUR  
 LATITUDE - 24 DEG. N  
 COOPERATORS - A. SOBHAN, M.Z. HOQUE, P.R. HOBBS  
 DATE PLANTED - JANUARY 22, 1976  
 DATE HARVESTED - MAY, 1976  
 SOIL TYPE - SAND 26%, SILT 44%, CLAY 30%, PH 7.7  
 FERTILIZER USED (KG/HA) - P 60.0, K 60.0  
 AMOUNT OF MOISTURE - 1068 MM  
 NUMBER OF IRRIGATIONS - 6 (152 MM)

COUNTRY - BANGLADESH  
 ELEVATION - 8 M  
 LONGITUDE - 90 DEG. E

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	SEMPUS	533.38	36.00	114.00	91.25	108.00	0.34	1.62	32.98	1.75
9	COLUMBUS	501.06	36.75	112.75	82.25	102.25	0.31	1.54	35.85	1.50
12	WILLIAMS	495.57	32.25	108.50	127.25	142.00	0.44	1.93	32.38	1.25
6	DAVIS	482.16	34.50	114.50	49.00	65.50	0.14	0.95	33.68	1.50
11	WOODWORTH	429.24	35.25	100.75	54.75	74.25	0.15	1.10	32.35	1.00
10	CLARK 63	363.55	38.25	112.25	39.25	53.75	0.11	0.75	33.88	2.00
13	CALLAND	354.05	38.00	117.50	43.00	62.50	0.13	0.88	38.70	1.50
7	TRACY	333.93	36.25	108.25	73.75	89.75	0.25	1.34	23.05	1.00
5	BOSSIER	326.80	37.50	115.00	56.00	70.50	0.16	1.05	31.30	1.75
1	HAMPTON 266A	312.26	32.25	117.00	57.00	73.50	0.14	1.06	32.25	1.50
3	IMPROVED PELICAN	301.12	36.50	117.00	50.00	67.50	0.13	1.03	28.55	1.00
8	FORREST	246.78	32.75	118.00	71.75	91.00	0.25	1.32	37.45	1.75
4	COBB	168.52	32.25	116.75	55.75	70.00	0.17	0.99	27.18	1.25
2	HARDEE	164.34	33.25	118.25	60.50	79.00	0.17	1.17	35.95	1.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		358.05	35.13	113.61	65.11	82.11	0.21	1.19	32.54	1.43
COEFFICIENT OF VARIATION		64.66	0.34	2.64	11.47	12.59	0.05	0.19	1.95	0.22
5% ISD VARIETY MEANS (*****=NS)		36.12%	1.94%	4.64%	35.24%	30.68%	45.40%	31.00%	11.98%	30.11%
		184.96	0.98	7.55	32.81	36.03	0.13	0.53	5.58	0.62
CORRELATIONS (+ - PROB=.05 +- - PROB=.01)										
YIELD KG/HA		1.00	0.22	-0.45++	0.38++	0.39++	0.41++	0.39++	0.16	0.16
DAYS TO FLOWER		0.22	1.00	-0.11	-0.27+	-0.24	-0.22	-0.19	0.10	0.19
DAYS TO MATURITY		-0.45++	-0.11	1.00	-0.35++	-0.35++	-0.35++	-0.35++	0.15	0.15
NODULE NUMBER 1		0.38++	-0.27+	-0.35++	1.00	0.99++	0.97++	0.97++	0.13	0.18
NODULE NUMBER 2		0.39++	-0.24	-0.35++	0.98++	1.00	0.95++	0.99++	0.17	0.19
NODULE WEIGHT 1		0.41++	-0.22	-0.35++	0.97++	0.95++	1.00	0.94++	0.14	0.13
NODULE WEIGHT 2		0.39++	-0.19	-0.35++	0.97++	0.99++	0.94++	1.00	0.20	0.19
PLANT HEIGHT		0.16	0.10	0.15	0.13	0.17	0.14	0.20	1.00	0.30+
LODGING		0.16	0.19	0.15	0.18	0.19	0.13	0.19	0.30+	1.00
SHATTER		-0.09	0.12	-0.03	-0.18	-0.19	-0.17	-0.16	-0.11	-0.16
HARVEST		-0.01	-0.06	0.10	0.24	0.24	0.25	0.24	-0.02	-0.20
PLANTS		0.12	0.03	0.14	0.13	0.19	0.13	0.20	0.56++	0.35++
PODS PER PLANT		0.02	-0.32+	0.22	0.11	0.10	0.13	0.11	0.15	0.25
100 SEED WEIGHT		-0.53++	-0.14	0.82++	-0.35++	-0.33+	-0.37++	-0.33+	0.22	0.16
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		-0.11	-0.09	-0.17	0.03	0.02	-0.01	0.02	-0.11	0.08
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 108

EXPERIMENT 653

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	SEMME	1.25	104.75	14.75	14.01	4.00
9	COLUMBUS	1.25	90.50	20.00	13.10	3.25
12	WILLIAMS	1.50	102.00	14.25	13.10	2.75
6	DAVIS	1.25	90.00	15.50	13.10	3.50
11	WOODWORTH	1.75	70.25	14.75	13.09	2.50
10	CLARK 63	1.00	65.00	19.75	13.10	3.75
13	CALLAND	1.50	105.25	18.75	13.10	4.25
7	TRACY	1.25	107.00	11.25	13.09	2.50
5	BOSSIER	1.50	84.75	18.00	13.11	4.50
1	HAMPTON 266A	1.25	94.50	18.00	14.01	4.75
3	IMPROVED PELICAN	1.75	109.75	13.25	13.11	4.00
8	FORREST	1.25	86.75	23.00	14.01	4.75
4	COBB	1.25	85.75	15.00	13.10	4.25
2	HARDER	1.00	104.25	17.75	13.11	4.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.34	92.89	16.71	13.29	3.82
COEFFICIENT OF VARIATION		0.22	7.16	1.91	0.01	0.55
5% LSD VARIETY MEANS (*****=NS)		32.23%	15.41%	22.85%	0.13%	28.92%
		*****	20.47	5.46	0.02	1.58
C O R R E L A T I O N S						
(* - PROB=.05    ** - PROB=.01)						
YIELD	KG/HA	-0.09	-0.01	0.12	0.02	-0.53+
DAYS TO FLOWER		0.12	-0.06	0.03	-0.32+	0.00
DAYS TO MATURITY		-0.03	0.10	0.14	0.22	0.00
NODULE NUMBER 1		-0.18	0.24	0.13	0.11	0.82+
NODULE NUMBER 2		-0.19	0.24	0.19	0.10	-0.35+
NODULE WEIGHT 1		-0.17	0.25	0.13	0.13	-0.33+
NODULE WEIGHT 2		-0.16	0.24	0.20	0.11	-0.37+
PLANT	HEIGHT	-0.11	-0.02	0.20	0.15	-0.33+
LODGING		-0.16	-0.20	0.56++	0.22	0.00
SHATTER		1.00	-0.20	0.35++	0.16	0.00
HARVEST		-0.20	1.00	-0.29+	-0.10	0.08
PLANTS		-0.29+	-0.16	0.07	-0.02	-0.14
PODS PPR		-0.10	0.16	1.00	0.09	0.00
100 SEED	WEIGHT	-0.10	0.07	0.20	0.19	0.00
QUALITY	OF SEED	-0.02	0.09	0.19	0.29+	0.00
DISEASE	I	0.00	0.00	0.00	1.00	-0.12
DISEASE	II	-0.14	-0.08	0.07	0.00	0.00
DISEASE	III	0.00	0.00	0.00	-0.12	1.00
				0.00	0.00	0.00
				0.00	0.00	1.00

TABLE 109 EXPERIMENT 467 YEAR 1975

REGION - ASIA COUNTRY - INDIA  
 SITE - JABALPUR ELEVATION - 393 M  
 LATITUDE - 23 DEG. 10 MIN. N LONGITUDE - 79 DEG. 57 MIN. E  
 COOPERATORS - S.M. SHARMA, S.K. MEHTA  
 DATE PLANTED - JULY 15, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - CLAY LOAM, PH 7.3  
 FERTILIZER USED (KG/HA) - N 20.0, P 80.0  
 AMOUNT OF MOISTURE - 1489 MM  
 LOCAL VARIETY - J.S.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	COBB	3531.96	39.50	106.75	0.00	0.00	0.00	0.00	45.75	1.00
2	HAMPTON 266A	3092.28	39.50	104.00	0.00	0.00	0.00	0.00	39.25	1.00
1	JUPITER	3083.95	45.00	109.75	0.00	0.00	0.00	0.00	73.50	1.00
3	HARDEE	2958.92	42.50	110.00	0.00	0.00	0.00	0.00	37.00	1.00
7	DAVIS	2900.58	58.00	104.00	0.00	0.00	0.00	0.00	43.25	1.00
4	IMPROVED PELICAN	2558.84	46.00	104.00	0.00	0.00	0.00	0.00	68.25	1.00
6	BOSSIER	2333.80	31.75	98.00	0.00	0.00	0.00	0.00	38.00	1.00
9	FORREST	2152.51	31.50	93.00	0.00	0.00	0.00	0.00	42.75	1.00
15	J.S.2	2079.58	39.00	94.75	0.00	0.00	0.00	0.00	29.25	1.00
13	WILLIAMS	1894.13	29.25	89.25	0.00	0.00	0.00	0.00	40.75	1.00
10	COLUMBUS	1808.69	32.25	93.00	0.00	0.00	0.00	0.00	46.25	1.00
8	TRACY	1764.94	30.50	89.00	0.00	0.00	0.00	0.00	38.25	1.00
12	WOODWORTH	1425.28	27.50	83.75	0.00	0.00	0.00	0.00	38.50	1.00
14	CALLAND	1410.70	28.00	85.00	0.00	0.00	0.00	0.00	43.25	1.00
11	CLARK 63	1004.37	28.25	89.75	0.00	0.00	0.00	0.00	34.50	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
CORRELATIONS										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.59++	0.81++	0.00	0.00	0.00	0.00	0.39++	0.00
DAYS TO FLOWER		0.59++	1.00	0.56++	0.00	0.00	0.00	0.00	0.32+	0.00
DAYS TO MATURITY		0.81++	0.56++	1.00	0.00	0.00	0.00	0.00	0.43++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	0.39++	0.32+	0.43++	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.33++	0.28+	0.16	0.00	0.00	0.00	0.00	0.69++	0.00
PODS PER PLANT		0.62++	0.19	0.61++	0.00	0.00	0.00	0.00	-0.07	0.00
100 SEED WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		-0.04	0.09	0.07	0.00	0.00	0.00	0.00	0.45++	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 109

EXPERIMENT 467

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
5	COBB	1.00	256.00	49.75	0.00	0.00	40.8	23.7
2	HAMPTON 266A	1.00	299.50	30.00	0.00	0.00	39.2	26.6
1	JUPITER	1.00	330.50	39.75	0.00	0.00	40.9	24.9
3	HARDEE	1.00	202.50	46.03	0.00	0.00	42.1	23.8
7	DAVIS	1.00	319.75	23.85	0.00	0.00	41.5	24.1
4	IMPROVED PELICAN	1.00	421.00	0.00	0.00	0.00	46.0	22.4
6	BOSSIER	1.00	237.50	28.90	0.00	0.00	44.9	24.1
9	FORREST	1.00	278.00	21.40	0.00	0.00	42.6	23.7
15	J.S.2	1.00	164.25	32.33	0.00	0.00	44.3	22.2
13	WILLIAMS	1.00	315.00	13.23	0.00	0.00	44.8	22.8
10	COLUMBUS	1.00	275.25	19.20	0.00	0.00	44.7	23.2
8	TRACY	1.00	268.50	17.02	0.00	0.00	42.5	23.5
12	WOODWORTH	1.00	295.25	11.90	0.00	0.00	45.0	23.5
14	CALLAND	1.00	266.50	13.98	0.00	0.00	44.8	22.1
11	CLARK 63	1.00	185.25	15.00	0.00	0.00	44.1	23.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	274.32	24.15	0.00	0.00		
COEFFICIENT OF VARIATION		0.00	18.63	1.98	0.00	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	13.58%	16.43%	0.00%	0.00%		
		0.00	53.25	5.67	0.00	0.00		
C O R R E L A T I O N S								
(* - - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.33++	0.62++	0.00	0.00	-0.04	0.00
DAYS TO FLOWER		0.00	0.28+	0.19	0.00	0.00	0.09	0.00
DAYS TO MATURITY		0.00	0.16	0.61++	0.00	0.00	0.07	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.69++	-0.07	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.45++	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.39++	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	-0.39++	1.00	0.00	0.00	0.41++	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00	-0.42++	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.41++	-0.42++	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00	0.00	0.00	0.00	1.00
							0.00	0.00



TABLE 110

EXPERIMENT 351

YEAR 1975

REGION - ASIA  
 SITE - BOGOR  
 LATITUDE - 6 DEG. 30 MIN. S  
 COOPERATORS - R.D. FREED, SUMARNIC  
 DATE PLANTED - JULY 16, 1975  
 SOIL TYPE - BROWN REGOSOL  
 FERTILIZER USED (KG/HA) - N 50.0, P 44.0, K 41.5  
 AMOUNT OF MOISTURE - 1594 MM  
 LOCAL VARIETIES - NO. 29, ORBA

COUNTRY - INDONESIA  
 ELEVATION - 270 M  
 LONGITUDE - 107 DEG. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOADING
15	ORBA	1273.17	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	60.25	3.25
13	WILLIAMS	1146.90	0.00	88.50	0.00	0.00	0.00	0.00	0.00	0.00	50.25	1.00
11	CLARK 63	1100.64	0.00	83.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00	1.00
12	WOODWORTH	1673.13	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	35.50	1.00
10	COLUMBUS	1035.21	0.00	85.25	0.00	0.00	0.00	0.00	0.00	0.00	47.00	1.25
4	IMPROVED PELICAN	928.10	0.00	88.00	0.00	0.00	0.00	0.00	0.00	0.00	71.25	2.25
8	TRACY	908.10	0.00	82.50	0.00	0.00	0.00	0.00	0.00	0.00	41.50	1.00
7	DAVIS	904.35	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	29.50	1.00
5	COBB	866.84	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	30.25	1.25
3	HARDEE	828.08	0.00	87.00	0.00	0.00	0.00	0.00	0.00	0.00	32.50	1.25
6	BOSSIER	821.00	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	29.25	1.00
14	NO. 29	728.90	0.00	89.00	0.00	0.00	0.00	0.00	0.00	0.00	88.50	2.75
9	FORREST	695.97	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	29.50	1.00
2	HAMPTON 266A	607.62	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	25.50	1.00
1	JUPITER	347.15	0.00	88.50	0.00	0.00	0.00	0.00	0.00	0.00	66.50	1.50
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN		884.34	0.00	82.52	0.00	0.00	0.00	0.00	0.00	0.00	45.15	1.43
COEFFICIENT OF VARIATION		76.70	0.00	1.23	0.00	0.00	0.00	0.00	0.00	0.00	5.01	0.21
5% LSD VARIETY MEANS (*****=NS)		219.23	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00	22.20	29.35
C O R R E L A T I O N S (+ - PROB=.05 ** - PROB=.01)												
YIELD	KG/HA	1.00	0.00	-0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.11
DAYS TO	FLOWER	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO	MATURITY	-0.07	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.21
NODULE	NUMBER 1	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LOADING	HEIGHT	0.11	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.70
SHATTER	HEIGHT	-0.11	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	HEIGHT	-0.07	0.00	-0.12	0.00	0.00	0.00	0.00	0.00	0.00	-0.12	-0.07
PLANT	WEIGHT	0.00	0.00	-0.38	0.00	0.00	0.00	0.00	0.00	0.00	-0.13	-0.01
PODS PER	PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY	OF SEED	-0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.29
DISEASE	I	0.00	0.00	-0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 110

EXPERIMENT 351

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
15	ORBA	1.00	217.75	0.00	0.00	4.00	--	--
13	WILLIAMS	1.00	199.75	0.00	0.00	2.00	44.8	21.8
11	CLARK 63	1.00	188.00	0.00	0.00	2.00	41.8	22.8
12	WOODWORTH	1.00	224.50	0.00	0.00	2.00	41.4	22.0
10	COLUMBUS	1.00	215.25	0.00	0.00	2.00	46.1	21.6
4	IMPROVED PELICAN	1.00	189.75	0.00	0.00	2.50	44.1	21.0
8	TRACY	1.00	206.50	0.00	0.00	3.00	43.0	20.8
7	DAVIS	1.00	241.50	0.00	0.00	4.00	43.9	21.1
5	COBB	1.00	232.00	0.00	0.00	4.00	43.2	21.9
3	HARDEE	1.00	216.00	0.00	0.00	4.00	44.2	21.5
6	BOSSIER	1.00	233.25	0.00	0.00	4.00	45.9	21.1
14	NO. 29	1.00	240.50	0.00	0.00	4.00	--	--
9	PORRETT	1.25	212.75	0.00	0.00	4.00	42.5	21.5
2	HAMPTON 266A	1.00	228.75	0.00	0.00	4.00	43.2	22.0
1	JUPITER	1.00	201.75	0.00	0.00	4.00	44.3	20.7
GRAND MEAN								
1.02								
216.53								
0.00								
3.03								
0.13								
0.00%								
8.51%								
0.37								
STANDARD ERROR OF A VARIETY MEAN								
0.06								
12.70%								
COEFFICIENT OF VARIATION								
12.70%								
5% LSD VARIETY MEANS (*****=NS)								
*****								
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.11	-0.07	0.00	0.00	-0.44+	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		-0.12	-0.38++	0.00	0.00	-0.31+	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT		-0.12	-0.13	0.00	0.00	0.03	0.00	0.00
HEIGHT		-0.07	0.01	0.00	0.00	0.23+	0.00	0.00
LODGING		-0.12	-0.13	0.00	0.00	0.13	0.00	0.00
SHATTER		1.00	-0.04	0.00	0.00	0.29+	0.00	0.00
PLANTS		-0.04	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	1.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00	0.00	0.00
QUALITY OF SEED		0.13	0.29+	0.00	0.00	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE III EXPERIMENT 626 YEAR 1975

REGION - ASIA  
 SITE - KEBUN JERUK  
 LATITUDE - 3 DEG. N  
 COOPERATOR - A. DJAMHURI-M  
 DATE PLANTED - DECEMBER 28, 1975  
 SOIL PH 5 - 6  
 FERTILIZER USED (KG/HA) - N 30.0, P 13.1, K 25.0  
 AMOUNT OF MOISTURE - 209 MM

COUNTRY - INDONESIA  
 ELEVATION - 50 M  
 LONGITUDE - 99 DEG. E  
 DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	1191.90	34.00	91.00	82.25	131.75	0.48	0.55	68.69	1.00
1	JUPIER	787.66	34.00	94.00	97.00	104.25	0.19	0.36	46.91	1.00
6	DAVIS	654.30	34.00	86.00	146.50	209.50	0.45	1.13	17.45	1.00
8	FORREST	450.09	34.00	88.00	36.75	72.75	0.04	0.17	19.90	1.00
5	BOSSIER	435.50	34.00	90.00	21.00	7.75	0.08	0.05	12.49	1.00
11	SEMMES	300.06	34.00	90.00	124.00	143.25	0.29	0.52	13.38	1.00
2	HAMPTON 266A	285.47	34.00	94.00	103.00	40.25	0.13	0.12	15.38	1.00
3	HARDEE	281.31	34.00	94.00	102.75	26.25	0.20	0.08	15.03	1.00
9	WILLIAMS	200.04	34.00	90.00	181.50	32.75	0.26	0.13	19.14	1.00
10	CALLAND	139.61	34.00	94.00	128.25	55.75	0.33	0.21	26.88	1.00
7	TRACY	45.01	34.00	91.00	102.25	82.25	0.25	0.33	10.79	1.00
GRAND MEAN										
433.72										
STANDARD ERROR OF A VARIETY MEAN										
103.95										
COEFFICIENT OF VARIATION										
47.94%										
5% LSD VARIETY MEANS (*****=NS)										
300.20										
C O R R E L A T I O N S										
(+ - PROB=.05    ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.00	-0.15	-0.16	0.32+	0.24	0.31+	0.77++	0.00
DAYS TO FLOWER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	-0.15	-0.16	0.00	1.00	0.01	-0.42++	-0.10	-0.42++	0.20	0.00
NODULE NUMBER 1	-0.16	0.00	0.01	0.00	1.00	0.34+	0.49++	0.39++	-0.05	0.00
NODULE NUMBER 2	0.32+	-0.42++	-0.42++	0.00	0.34+	1.00	0.52++	0.93++	0.30	0.00
NODULE WEIGHT 1	0.24	0.00	-0.10	0.00	0.49++	0.52++	1.00	0.51++	0.30	0.00
NODULE WEIGHT 2	0.31+	-0.42++	-0.42++	0.00	0.39++	0.93++	0.51++	1.00	0.17	0.00
PLANT	HEIGHT	0.77++	0.00	0.20	-0.05	0.24	0.30	0.17	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.76++	0.00	-0.42++	-0.02	0.62++	0.22	0.55++	0.58++	0.00
PODS PER	PLANT	0.72++	0.00	0.18	-0.05	0.18	0.28	0.10	0.79++	0.00
100 SEED	WEIGHT	-0.38+	0.00	0.15	0.16	-0.09	-0.18	-0.05	-0.38+	0.00
QUALITY	OF SEED	-0.47++	0.00	0.05	-0.23	-0.21	-0.12	-0.15	-0.29	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE III EXPERIMENT 626 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
4	IMPROVED PELICAN	1.00	114.25	61.75	11.50	2.75	40.3	24.5
1	JUPITER	1.00	99.25	46.58	11.50	3.00	43.8	21.6
6	DAVIS	1.00	112.00	25.18	14.00	2.75	41.7	23.3
8	FORREST	1.00	79.50	30.03	12.00	3.75	41.4	23.1
5	BOSSIER	1.00	34.25	25.03	12.50	3.50	43.9	23.5
11	SEMMES	1.00	64.00	24.18	13.25	2.50	45.8	22.7
2	HAMPTON 266A	1.00	31.75	23.60	15.50	3.00	41.8	22.9
3	HARDEE	1.00	17.00	31.33	14.50	3.00	43.0	23.7
9	WILLIAMS	1.00	25.00	22.18	13.00	3.00	44.0	22.6
10	CALLAND	1.00	8.75	30.30	13.75	3.75	42.1	24.5
7	TRACY	1.00	7.00	13.45	12.50	5.00	42.5	23.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	53.89	30.32	13.09	3.27		
COEFFICIENT OF VARIATION		0.00	7.15	4.89	0.85	0.20		
5% LSD VARIETY MEANS (*****=NS)		0.00	26.55%	32.24%	12.96%	12.25%		
		0.00	20.65	14.12	2.45	0.58		
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.76++	0.72++	-0.38+	-0.47++	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	-0.42++	0.18	0.15	0.05	0.00	0.00
NODULE NUMBER 1		0.00	-0.02	-0.05	0.16	-0.23	0.00	0.00
NODULE NUMBER 2		0.00	0.62++	0.18	-0.09	-0.21	0.00	0.00
NODULE WEIGHT 1		0.00	0.22	0.28	-0.18	-0.12	0.00	0.00
NODULE WEIGHT 2		0.00	0.55++	0.10	-0.05	-0.15	0.00	0.00
PLANT HEIGHT		0.00	0.58++	0.79++	-0.38+	-0.29	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.45++	-0.32+	-0.43++	0.00	0.00
PODS PER PLANT		0.00	0.45++	1.00	-0.38+	-0.37+	0.00	0.00
100 SEED WEIGHT		0.00	-0.32+	-0.38+	1.00	-0.16	0.00	0.00
QUALITY OF SEED		0.00	-0.43++	-0.37+	-0.16	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 112

EXPERIMENT 381

YEAR 1975

REGION - ASIA  
 SITE - JEJU  
 LATITUDE - 33 DEG. 30 MIN. N  
 COOPERATORS - K.Y. PARK, S.K. KIM, J.M. YOHE  
 DATE PLANTED - JUNE 11, 1975  
 FERTILIZER USED (KG/HA) - N 40.0, P 80.0, K 80.0  
 AMOUNT OF MOISTURE - 795 MM  
 LOCAL VARIETY - EUNDAEDU

COUNTRY - KOREA  
 ELEVATION - 188 M  
 LONGITUDE - 126 DEG. 30 MIN. E

DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	179.87	55.75	117.50	200.25	181.25	0.54	0.69	72.30	1.00
7	DAVIS	167.45	64.50	130.00	263.75	207.50	0.66	0.97	80.05	1.00
8	TRACY	167.20	67.00	120.50	335.00	189.75	1.04	0.87	66.68	1.00
15	EUNDAEDU	149.86	57.50	156.75	256.25	148.75	0.80	1.18	65.45	1.00
10	COLUMBUS	143.86	51.00	122.50	216.50	257.00	0.58	0.85	70.40	1.00
14	CALLAND	123.11	49.00	128.00	221.00	198.25	0.97	1.28	77.25	1.00
13	WILLIAMS	121.36	49.00	121.25	253.25	219.50	0.72	0.85	70.10	1.00
11	CLARK 63	113.02	49.00	117.25	258.00	198.50	0.63	0.62	75.75	1.00
12	WOODWORTH	112.27	49.00	101.00	179.00	191.75	0.58	0.97	75.85	1.00
5	COBB	102.19	68.00	151.50	263.25	158.00	0.68	0.92	93.10	1.00
4	IMPROVED PELICAN	101.81	81.00	141.75	263.75	144.00	0.68	0.67	102.85	1.00
3	HARDEE	96.52	76.50	152.75	261.50	160.00	0.63	0.57	96.80	1.00
6	BOSSIER	84.56	66.75	138.00	254.00	137.25	0.62	0.57	90.20	1.00
2	HAMPTON 266A	79.02	67.25	153.00	253.25	145.25	0.47	0.73	93.70	1.00
1	JUPITER	62.85	83.25	158.25	120.75	118.00	0.27	0.33	98.85	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.31+	-0.31+	-0.37++	0.01	0.11	-0.07	0.08	-0.57++	0.00
DAYS TO MATURITY		0.37++	1.00	0.68++	-0.04	-0.47++	-0.21	-0.41++	0.70++	0.00
NODULE NUMBER 1		0.01	-0.04	-0.06	1.00	0.55+	-0.14	0.15	0.51++	0.00
NODULE NUMBER 2		0.11	-0.47++	-0.06	0.55+	1.00	0.73++	0.43++	0.02	0.00
NODULE WEIGHT 1		-0.07	-0.21	-0.14	0.73++	0.50++	0.50++	0.57++	-0.33++	0.00
NODULE WEIGHT 2		0.08	-0.41++	-0.15	0.43++	0.50++	1.00	0.57++	-0.05	0.00
PLANT	HEIGHT	-0.57++	0.70++	0.51++	0.02	-0.33++	-0.05	1.00	-0.34++	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	-0.34++	1.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS	HARVEST	-0.10	0.49++	0.38++	-0.10	-0.34++	-0.20	-0.29+	0.38++	0.00
PODS PER	PLANT	0.69++	-0.57++	-0.61++	0.04	0.40++	0.12	0.28+	-0.64++	0.00
100 SEED	WEIGHT	0.19	-0.61++	-0.60++	0.08	0.43++	0.10	0.19	-0.41++	0.00
QUALITY	OF SEED	0.07	-0.46++	-0.22	-0.16	0.12	0.10	0.25+	-0.31+	0.00
DISEASE	I	0.20	-0.39++	-0.13	-0.07	0.10	0.04	0.13	-0.22	0.00
DISEASE	II	0.23	-0.24	-0.18	0.20	0.22	0.23	0.35++	-0.20	0.00
DISEASE	III	-0.06	-0.07	-0.03	0.05	-0.04	0.15	0.05	0.03	0.00



TABLE 112

EXPERIMENT 381

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
9	FORREST	1.00	88.25	34.30	16.93	3.50
7	DAVIS	1.00	82.50	23.90	17.98	3.50
8	TRACY	1.00	73.50	38.23	17.98	3.25
15	EUNDAEDU	1.00	71.25	20.30	13.50	4.00
10	COLUMBUS	1.00	73.00	32.48	20.00	3.25
14	CALLAND	1.00	64.25	36.70	21.70	4.50
13	WILLIAMS	1.00	58.25	34.33	21.80	4.25
11	CLARK 63	1.00	65.00	21.30	18.83	4.00
12	WOODWORTH	1.00	50.00	29.83	18.83	4.25
5	COBB	1.00	77.25	10.80	14.73	4.00
4	IMPROVED PELICAN	1.00	89.75	17.70	14.10	3.00
3	HARDEE	1.00	65.50	13.75	15.18	2.75
6	BOSSIER	1.00	84.25	7.55	15.05	3.25
2	HAMPTON 266A	1.00	96.50	11.98	14.93	2.75
1	JUPITER	1.00	113.00	9.12	13.05	3.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
C O R R E L A T I O N S						
(* - PROB=.05    ** - PROB=.01)						
YIELD	KG/HA	0.00	-0.10	0.69++	0.19	0.07
DAYS TO FLOWER		0.00	0.49++	-0.57++	-0.61++	-0.39++
DAYS TO MATURITY		0.00	0.38++	-0.61++	-0.60++	-0.24
NODULE NUMBER 1		0.00	-0.10	0.04	0.08	-0.13
NODULE NUMBER 2		0.00	-0.34++	0.40++	0.43++	-0.07
NODULE WEIGHT 1		0.00	-0.20	0.12	0.10	0.22
NODULE WEIGHT 2		0.00	-0.29+	0.28+	0.19	0.04
PLANT	HEIGHT	0.00	0.38++	-0.64++	-0.41++	0.13
LODGING		0.00	0.00	0.00	0.00	-0.22
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	-0.33++	-0.36++	0.00
PLANTS	PER PLANT	0.00	-0.33++	1.00	0.46++	-0.02
PODS PER	100 SEED	0.00	-0.36++	0.46++	0.29+	0.19
QUALITY	OF SEED	0.00	-0.22	0.28+	0.16	0.16
DISEASE	I	0.00	-0.16	0.29+	0.31+	0.24
DISEASE	II	0.00	-0.02	0.19	0.16	0.13
DISEASE	III	0.00	-0.05	-0.00	0.05	0.01
					0.17	-0.24
					0.23	0.06
					-0.24	-0.07
					-0.18	-0.03
					0.20	0.05
					0.23	-0.04
					0.35++	0.15
					-0.20	0.05
					0.00	0.00
					0.00	0.00
					-0.16	-0.05
					0.29+	-0.00
					0.31+	0.05
					1.00	-0.08
					1.00	0.17
					0.13	-0.24
					0.17	1.00

TABLE 113 EXPERIMENT 385 YEAR 1975

REGION - ASIA  
SITE - SUMEON  
LATITUDE - 37 DEG. 16 MIN. N  
COOPERATORS - K.Y. PARK, S.K. KIM, J.M. YCHE  
DATE PLANTED - MAY 21, 1975  
SOIL TYPE - SAND 10%, SILT 50%, CLAY 40%, PH 5.2  
FERTILIZER USED (KG/HA) - N 40.0, P 50.0, K 44.0  
AMOUNT CF MOISTURE - 896 MM  
NUMBER CF IRRIGATIONS - 1 (20 MM)  
LOCAL VARIETY - KWANG KYC

COUNTRY - KOREA  
ELEVATION - 37 M  
LONGITUDE - 126 DEG. 59 MIN. E  
DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	1111.01	35.50	98.50	225.25	350.75	0.90	2.40	2.40	52.75	1.50
14	CALLAND	1080.26	32.50	96.75	34.75	288.25	0.21	1.79	1.79	60.40	2.75
10	COLUMBUS	1028.87	39.25	106.00	295.00	418.75	1.29	2.89	2.89	59.00	2.25
12	WOODWORTH	915.27	34.50	95.75	192.75	286.75	0.93	2.61	2.61	51.55	3.00
7	BEESON	892.05	32.00	87.00	43.50	205.00	0.27	1.11	1.11	43.60	1.75
11	CLARK 63	876.26	36.75	98.50	117.25	260.00	0.66	1.97	1.97	46.70	3.00
9	FORREST	873.84	43.00	108.75	268.75	397.75	1.77	3.22	3.22	60.15	1.75
15	KWANG KYO	840.38	39.25	94.00	304.50	357.50	2.55	3.16	3.16	43.25	1.75
6	CORSOY	832.25	30.50	83.50	72.75	255.25	0.45	1.08	1.08	35.05	1.50
8	WELLS	764.49	32.00	84.00	100.25	284.25	0.52	1.47	1.47	36.25	1.25
5	AMSOY 71	744.11	32.00	85.75	80.00	276.50	0.21	1.26	1.26	38.95	1.75
3	HARK	734.06	29.00	84.00	203.00	203.75	0.24	0.81	0.81	39.75	1.50
4	HODGSON	577.99	28.25	76.00	121.50	230.75	0.41	1.17	1.17	27.60	1.50
2	SWIFT	548.03	28.75	76.75	113.75	226.75	0.48	1.73	1.73	37.90	1.50
1	ALTONA	459.30	25.00	69.50	153.50	177.50	0.34	1.28	1.28	41.40	3.75
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****NS)											
C O E F F I C I E N T S											
(+ - PROB=.05    +- - PROB=-.01)											
YIELD	KG/HA	1.00	0.45++	0.61++	0.21	0.34++	0.18	0.31+	0.31+	0.64++	0.23
DAYS TO FLOWER	0.45++	1.00	0.92++	0.92++	0.50++	0.64++	0.73++	0.77++	0.77++	0.58++	-0.09
DAYS TO MATURITY	0.61++	0.92++	1.00	0.40++	0.40++	0.61++	0.52++	0.69++	0.69++	0.74++	0.03
NODULE NUMBER 1	0.21	0.50++	0.40++	1.00	0.58++	0.72++	0.72++	0.63++	0.63++	0.31+	0.06
NODULE NUMBER 2	0.34++	0.64++	0.61++	0.58++	1.00	0.53++	1.00	0.78++	0.78++	0.43++	-0.04
NODULE WEIGHT 1	0.18	0.73++	0.52++	0.72++	0.63++	0.71++	0.78++	1.00	1.00	0.55++	-0.08
NODULE WEIGHT 2	0.31+	0.77++	0.69++	0.63++	0.63++	0.71++	0.78++	1.00	1.00	0.55++	-0.08
PLANT HEIGHT	0.64++	0.58++	0.74++	0.31+	0.43++	0.31+	0.31+	0.55++	0.55++	1.00	0.14
LODGING	0.23	-0.09	0.03	0.06	-0.04	-0.04	-0.08	0.14	0.14	0.39++	0.39++
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST	0.28+	0.06	0.07	0.12	0.02	0.02	0.08	0.11	0.11	0.12	0.00
PLANT WEIGHT	0.44++	0.63++	0.69++	0.28+	0.52++	0.44++	0.44++	0.67++	0.67++	0.68++	-0.14
100 SEED	0.26+	-0.10	-0.01	-0.01	0.05	0.05	-0.04	-0.01	-0.01	0.08	0.28+
QUALITY OF SEED	-0.17	-0.30+	-0.22	-0.27+	-0.11	-0.35++	-0.04	-0.04	-0.04	0.04	0.14
DISEASE I	0.05	-0.12	-0.10	-0.16	0.14	-0.13	-0.09	-0.09	-0.09	-0.03	0.38++
DISEASE II	-0.07	-0.38++	-0.27+	-0.38++	-0.31+	-0.50++	-0.29+	-0.29+	-0.29+	-0.12	0.02
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33++
										0.00	0.00

TABLE 113 EXPERIMENT 385 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
13	WILLIAMS	1.00	150.50	17.30	15.48	3.00
14	CALLAND	1.00	135.75	20.75	15.35	3.75
10	COLUMBUS	1.00	133.50	18.63	15.20	2.75
12	WOODWORTH	1.00	126.00	22.95	13.23	4.00
7	BEESON	1.00	148.25	10.28	13.30	3.50
11	CLARK 63	1.00	125.75	17.23	12.70	3.50
9	FORREST	1.00	154.75	22.55	8.88	3.50
15	KWANG KYO	1.00	137.50	18.75	15.63	1.75
6	CORSOY	1.00	150.75	10.35	14.18	2.25
8	WELLS	1.00	147.75	13.78	12.13	4.00
5	AMSOY 71	1.00	144.75	11.23	14.13	3.50
3	HARK	1.00	150.00	10.55	13.48	2.25
4	HODGSON	1.00	127.75	10.40	12.30	3.75
2	SWIFT	1.00	129.50	12.93	13.03	3.75
1	ALTONA	1.00	138.50	10.23	13.38	4.25
GRAND MEAN						
140.07						
STANDARD ERROR OF A VARIETY MEAN						
0.00						
COEFFICIENT OF VARIATION						
5.73						
22.37%						
7.05%						
16.06%						
5% LSD VARIETY MEANS (*****=NS)						
0.00						
16.38						
4.86						
0.76						
C O R R E L A T I O N S						
(+ - PROB=.05      ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.28+	0.44++	0.26+	-0.17
DAYS TO FLOWER	0.00	0.06	0.63++	0.30+	-0.10	-0.38++
DAYS TO MATURITY	0.00	0.07	0.69++	0.27+	-0.01	-0.27+
NODULE NUMBER 1	0.00	0.12	0.28+	-0.27+	-0.16	-0.38++
NODULE NUMBER 2	0.00	0.02	0.52++	0.05	-0.11	-0.31+
NODULE WEIGHT 1	0.00	0.08	0.44++	-0.04	-0.35++	-0.50++
NODULE WEIGHT 2	0.00	-0.11	0.67++	-0.01	-0.04	-0.29+
PLANT HEIGHT	0.00	0.12	0.68++	0.08	0.04	-0.12
LODGING	0.00	-0.14	0.28+	0.14	0.38++	0.33++
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.00	1.00	-0.23	-0.19	-0.11	-0.30+
PLANTS	0.00	0.00	0.00	0.05	0.02	-0.06
PODS PER PLANT	0.00	-0.19	0.05	1.00	0.03	0.00
100 SEED WEIGHT	0.00	-0.11	0.02	-0.38++	0.10	0.03
QUALITY OF SEED	0.00	-0.03	-0.07	0.10	0.05	0.58++
DISEASE I	0.00	-0.30+	-0.06	0.03	1.00	0.23
DISEASE II	0.00	0.00	0.00	0.00	0.23	1.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE IV	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 114 EXPERIMENT 384 YEAR 1975

REGION - ASIA COUNTRY - KOREA  
 SITE - SUREON ELEVATION - 37 M  
 LATITUDE - 37 DEG. 16 MIN. N LONGITUDE - 126 DEG. 59 MIN. E  
 COOPERATORS - K.Y. PARK, S.K. KIM, J.M. YCHE  
 DATE PLANTED - JUNE 16, 1975 DATE HARVESTED - SEPTEMBER, 1975  
 SOIL TYPE - SAND 10%, SILT 50%, CLAY 40%, PH 5.2  
 FERTILIZER USED (KG/HA) - N 40.0, P 50.0, K 44.0  
 AMOUNT OF MOISTURE - 912 MM  
 NUMBER OF IRRIGATIONS - 1 (19 MM)  
 LOCAL VARIETY - KWANG KYO

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	KWANG KYO	1722.18	48.75	105.00	316.50	350.50	1.24	2.86	64.02	1.75
12	WOODWORTH	1605.57	38.25	105.75	144.00	106.25	0.47	1.00	70.65	1.50
14	CALIANE	1553.89	39.00	110.75	85.00	186.25	0.15	1.73	95.75	1.75
10	COLUMBUS	1530.89	46.00	122.50	339.75	444.00	1.18	3.70	83.07	3.00
13	WILLIAMS	1452.17	38.50	110.50	152.50	195.50	0.26	1.54	76.10	2.00
9	FORREST	1438.66	58.00	127.50	255.25	439.75	1.68	4.27	96.25	2.25
11	CLARK 63	1382.07	40.50	111.25	139.00	176.75	0.44	0.87	82.45	2.25
4	HODGSON	1376.69	33.00	89.00	137.50	181.50	0.16	1.00	59.65	1.00
7	BESSEN	1351.06	35.75	101.50	111.00	106.00	0.26	1.11	65.00	1.00
2	SWIFT	1345.39	32.25	89.50	125.25	191.25	0.22	1.29	64.55	1.00
8	WELLS	1329.64	35.00	96.50	164.50	199.50	0.19	1.28	55.25	1.00
6	CORSOY	1213.12	35.00	101.50	133.25	274.50	0.83	1.56	60.45	1.00
5	AMSOY 71	1210.78	35.00	105.50	87.25	101.00	0.14	0.46	62.15	1.00
1	ALTONA	1194.41	31.75	79.75	151.50	245.75	0.18	1.53	54.65	2.00
3	HARK	1160.61	33.00	101.25	93.00	293.75	0.09	1.34	57.95	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ ~ PROB=.05 ++ ~ PROB=.01)										
YIELD	KG/HA	1.00	0.43++	0.33++	0.25	0.16	0.17	0.25+	0.45++	0.33++
DAYS TO FLOWER	0.43++	0.79++	1.00	0.79++	0.63++	0.58++	0.68++	0.73++	0.62++	0.57++
DAYS TO MATURITY	0.79++	0.33++	0.79++	1.00	0.39++	0.40++	0.51++	0.53++	0.40++	0.53++
NODULE NUMBER 1	0.25	0.63++	0.63++	0.39++	1.00	0.53++	0.63++	0.61++	0.18	0.52++
NODULE NUMBER 2	0.16	0.58++	0.40++	0.40++	0.53++	1.00	0.59++	0.83++	0.26+	0.44++
NODULE WEIGHT 1	0.17	0.68++	0.51++	0.51++	0.63++	0.59++	1.00	0.64++	0.26+	0.33++
NODULE WEIGHT 2	0.25+	0.73++	0.53++	0.53++	0.61++	0.83++	0.64++	1.00	0.42++	0.48++
PLANT	0.45++	0.62++	0.74++	0.74++	0.18	0.26+	0.26+	0.42++	1.00	0.54++
LODGING	0.33++	0.57++	0.57++	0.53++	0.52++	0.44++	0.33++	0.48++	0.54++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	-0.33++	-0.25	-0.25	-0.14	-0.40++	-0.20	-0.29+	-0.16	-0.15	-0.26+
PODS PER PLANT	0.60++	0.43++	0.28+	0.28+	0.27+	0.20	0.26+	0.23	0.41++	0.33++
100 SEED WEIGHT	-0.23	-0.51++	-0.37++	-0.37++	-0.37++	-0.33++	-0.40++	-0.40++	-0.39++	-0.33++
QUALITY OF SEED	-0.45++	-0.66++	-0.27+	-0.27+	-0.47++	-0.49++	-0.44++	-0.54++	-0.32+	-0.27+
DISEASE I	-0.19	-0.35++	-0.51++	-0.51++	-0.03	-0.08	-0.03	-0.18	-0.42++	-0.17
DISEASE II	-0.26+	-0.76++	-0.42++	-0.42++	-0.64++	-0.64++	-0.57++	-0.65++	-0.31+	-0.46++
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 114 EXPERIMENT 384 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
15	KWANG KYO	1.00	137.50	37.53	18.33	1.25
12	WOODWORTH	1.00	153.50	27.65	15.58	4.50
14	CALLAND	1.00	155.25	32.00	18.10	4.00
10	COLUMBUS	1.00	140.00	23.40	14.58	3.75
13	WILLIAMS	1.00	165.75	21.15	17.63	4.00
9	FORREST	1.00	157.75	24.80	10.88	2.00
11	CLARK 63	1.00	142.00	23.43	15.73	4.25
4	HODGSCN	1.00	154.75	21.35	15.68	3.50
7	BESCN	1.00	160.25	16.10	18.85	4.50
2	SHIFT	1.00	155.25	20.30	15.38	3.50
8	WELLS	1.00	161.50	16.58	15.75	5.00
6	CORSOY	1.00	158.00	18.78	15.83	5.00
5	AMSOY 71	1.00	165.00	12.98	21.15	5.00
1	ALTCNA	1.00	156.75	16.78	18.90	4.25
3	HARK	1.00	157.25	15.63	19.35	4.25
GRAND MEAN						
154.70						
21.89						
16.78						
3.92						
0.00						
5.59						
3.06						
27.91%						
8.63%						
0.00%						
7.22%						
12.01%						
0.00						
8.73						
2.07						
0.67						
5% LSD VARIETY MEANS (*****=NS)						
C C R R E L A T I O N S						
(+ - PROB=.05    ++ - PROB=.01)						
YIELD	KG/HA	0.00	-0.33++	0.60++	-0.23	-0.45++
DAYS TO FLOWER	0.00	0.00	-0.25	0.43++	-0.51++	-0.19
DAYS TO MATURITY	0.00	0.00	-0.14	0.28+	-0.35++	-0.76++
NODULE NUMBER 1	0.00	0.00	-0.40++	0.27+	-0.27+	-0.42++
NODULE NUMBER 2	0.00	0.00	-0.20	0.20	-0.03	-0.64++
NODULE WEIGHT 1	0.00	0.00	-0.29+	0.26+	-0.08	-0.64++
NODULE WEIGHT 2	0.00	0.00	-0.16	0.23	-0.03	-0.57++
PLANT	HEIGHT	0.00	-0.15	0.41++	-0.54++	-0.18
LODGING	0.00	0.00	-0.26+	0.33++	-0.32+	-0.31+
SHATTER	0.00	0.00	0.00	0.00	-0.17	-0.46++
HARVEST	1.00	1.00	0.00	0.00	0.00	0.00
PLANT	0.00	0.00	-0.26+	-0.26+	0.01	0.21
WEIGHT	0.00	0.00	0.13	1.00	-0.23	-0.29+
OF SEED	0.00	0.00	0.28+	-0.51++	0.04	0.31+
QUALITY	0.00	0.00	0.01	0.28+	1.00	0.76++
DISEASE I	0.00	0.00	0.01	-0.23	0.16	0.09
DISEASE II	0.00	0.00	0.21	-0.29+	1.00	1.00
DISEASE III	0.00	0.00	0.00	0.00	0.09	0.00
					0.00	1.00



TABLE 115 EXPERIMENT 383 YEAR 1975

REGION - ASIA COUNTRY - KOREA  
SITE - SUWEON ELEVATION - 37 M  
LATITUDE - 37 DEG. 16 MIN. N LONGITUDE - 126 DEG. 59 MIN. E  
COOPERATORS - K.Y. PARK, S.K. KIM, J.M. YCHE  
DATE PLANTED - JULY 10, 1975 DATE HARVESTED - SEPTEMBER, 1975  
SOIL TYPE - SAND 10%, SILT 50%, CLAY 40%, PH 5.2  
FERTILIZER USED (KG/HA) - N 40.0, P 50.0, K 44.0  
AMOUNT CP MOISTURE - 782 MM  
NUMBER CP INEIGATIONS - 30  
LOCAL VARIETY - KWANG KYO

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	PLANT LODGING
13	WILLIAMS	1698.92	49.50	125.25	277.75	427.75	0.73	1.49	97.45	1.25
7	BEESON	1644.79	44.00	118.00	169.00	283.25	0.23	1.10	95.35	1.75
12	WOODWORTH	1562.69	50.00	124.25	188.50	262.75	0.49	1.67	92.65	1.00
4	HODGSON	1561.52	39.75	105.25	239.50	199.50	0.22	0.80	69.85	1.00
6	CORSOY	1554.31	45.25	111.50	159.00	188.25	0.23	0.82	86.55	2.25
3	HARK	1529.39	41.00	111.75	248.00	304.25	0.35	1.14	90.90	1.75
14	CALLAND	1478.09	47.50	130.75	158.25	308.50	0.28	0.90	104.75	2.25
11	CLARK 63	1472.50	54.50	128.75	170.25	416.25	0.40	1.78	103.25	1.75
15	KWANG KYO	1460.92	65.00	125.00	466.50	864.25	1.03	4.49	67.85	3.50
10	COLUMBUS	1405.66	57.75	138.50	382.75	142.00	1.19	0.87	108.30	2.25
8	WELLS	1388.44	42.00	111.50	159.00	196.25	0.31	1.09	82.85	1.00
2	SWIFT	1246.54	41.25	105.25	230.75	201.50	0.38	0.91	68.05	1.00
9	FORREST	1209.28	72.00	149.50	324.25	381.75	1.43	2.99	108.20	3.75
1	ALTONA	1092.59	37.00	98.50	213.25	201.50	0.25	1.23	51.15	1.00
5	AMSOY 71	989.03	43.00	117.00	248.75	254.25	0.37	0.83	87.50	1.75
GRAND MEAN										
1419.64										
STANDARD ERROR OF A VARIETY MEAN										
100.75										
COEFFICIENT OF VARIATION										
14.19%										
5% LSD VARIETY MEANS (*****=NS)										
287.96										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER	0.01	0.01								
DAYS TO MATURITY	0.06	0.87++								
NODULE NUMBER 1	0.06	0.87++								
NODULE NUMBER 2	0.07	0.55++								
NODULE WEIGHT 1	0.03	0.36++								
NODULE WEIGHT 2	0.03	0.51++								
PLANT HEIGHT	0.09	0.72++								
LODGING	0.10	0.40++								
SHATTER	0.02	0.77++								
HARVEST	0.07	0.44++								
PLANT	0.07	0.51++								
PODS PER 100 SEED	0.08	0.43++								
QUALITY OF SEED	0.14	0.72++								
DISEASE I	0.12	0.43++								
DISEASE II	0.22	0.33++								
DISEASE III	0.00	0.00								

TABLE 115 EXPERIMENT 383 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CRCS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
13	WILLIAMS	1.00	151.00	29.25	16.28	4.50
7	BEESON	1.00	144.50	21.15	20.35	5.00
12	WOODHORTH	1.00	140.50	26.38	15.15	4.50
4	HODGSCN	1.00	146.75	22.85	16.45	3.50
6	CORSOY	1.00	154.75	26.88	15.23	4.50
3	HARK	1.00	149.50	19.65	18.05	3.75
14	CALLAND	1.00	134.25	26.93	18.58	4.75
11	CLARK 63	1.00	136.75	31.30	15.38	4.75
15	KWANG KYO	2.25	116.00	36.10	18.18	1.50
10	COLUMBUS	1.00	132.00	34.13	14.85	4.00
8	WELLS	1.00	153.50	18.55	17.08	4.75
2	SWIFT	1.00	144.25	19.08	15.18	4.75
9	FORREST	1.00	136.50	49.93	11.98	3.50
1	ALTONA	1.00	153.00	17.95	16.43	4.00
5	AMSOY 71	1.00	153.75	16.23	18.80	5.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.08	143.13	26.42	16.53	4.18
COEFFICIENT OF VARIATION		0.06	6.35	2.86	0.50	0.30
5% LSD VARIETY MEANS (*****=NS)		11.92%	8.88%	21.68%	6.04%	14.49%
		0.18	18.16	8.19	1.43	0.87
C O R R E L A T I O N S						
(+ - PROB=-.05    +- - PROB=-.01)						
YIELD	KG/HA	0.07	-0.06	0.08	0.14	-0.07
DAYS TO	FLOWER	0.43++	-0.51++	0.82++	-0.43++	0.12
DAYS TO	MATURITY	0.09	-0.41++	0.72++	-0.33++	-0.35++
NODULE	NUMBER 1	0.51++	-0.43++	0.38++	-0.08	-0.17
NODULE	NUMBER 2	0.60++	-0.40++	0.40++	-0.14	-0.59++
NODULE	WEIGHT 1	0.29+	-0.39++	0.59++	-0.43++	0.01
NODULE	WEIGHT 2	0.61++	-0.47++	0.55++	-0.10	-0.37++
PLANT	HEIGHT	-0.26+	-0.14	0.40++	-0.14	-0.57++
LODGING		0.46++	-0.39++	0.59++	-0.15	-0.26+
SHATTER		1.00	-0.40++	0.24	0.17	0.27+
HARVEST		-0.40++	1.00	-0.40++	-0.04	-0.42++
PLANTS	PER	0.24	-0.40++	1.00	0.33++	-0.47++
100 SEED	WEIGHT	0.17	-0.04	-0.49++	-0.35++	0.27+
QUALITY	OF SEED	-0.69++	0.33++	-0.35++	0.05	-0.41++
DISEASE	I	0.12	0.09	-0.25	-0.05	0.28+
DISEASE	II	-0.47++	0.27+	-0.41++	1.00	0.63++
DISEASE	III	0.00	0.00	0.00	0.22	1.00
					0.00	0.00
					0.00	1.00

TABLE 116 EXPERIMENT 428 YPAR 1975

REGION - ASIA  
 SITE - KHUMAITAR  
 LATITUDE - 27 DEG. 40 MIN. N  
 COOPERATORS - MEENA PANDAY, JUJUBHAI MANANDHAR  
 DATE PLANTED - JUNE 4, 1975  
 SOIL TYPE - CLAY  
 FERTILIZER USED (KG/HA) - P 35.0, K 66.0  
 AMOUNT OF MOISTURE - 1318 MM  
 COUNTRY - NEPAL  
 ELEVATION - 1360 M  
 LONGITUDE - 85 DEG. 20 MIN. E  
 DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	PLANT LODGING
9	FORREST	2445.49	40.00	123.00	0.00	0.00	0.00	0.00	20.75	1.00
10	COLUMBUS	2390.06	40.00	123.00	0.00	0.00	0.00	0.00	20.80	1.00
15	BONUS	1678.25	38.00	102.25	0.00	0.00	0.00	0.00	30.33	1.00
13	WILLIAMS	1429.87	39.25	102.00	0.00	0.00	0.00	0.00	27.50	1.00
14	CALLAND	1361.52	37.25	105.00	0.00	0.00	0.00	0.00	26.30	1.00
6	CORSOY	1074.38	31.75	99.00	0.00	0.00	0.00	0.00	21.15	1.00
7	BRESON	921.85	38.50	100.00	0.00	0.00	0.00	0.00	25.80	1.00
11	CLARK 63	909.35	40.50	100.00	0.00	0.00	0.00	0.00	26.18	1.00
3	HARK	892.26	38.00	96.75	0.00	0.00	0.00	0.00	22.80	1.00
12	WOODWORTH	878.09	39.00	93.50	0.00	0.00	0.00	0.00	28.55	1.00
4	HODGSON	671.38	34.75	92.00	0.00	0.00	0.00	0.00	27.00	1.00
5	ANSOY 71	670.13	37.25	99.00	0.00	0.00	0.00	0.00	24.93	1.00
2	SWIFT	598.04	35.00	86.25	0.00	0.00	0.00	0.00	25.75	1.00
8	WELLS	560.11	37.00	100.25	0.00	0.00	0.00	0.00	21.13	1.00
1	ALTONA	447.59	23.50	86.75	0.00	0.00	0.00	0.00	28.08	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05    +- - PROB=.01)										
YIELD	KG/HA	1.00	0.31+	0.82++	0.00	0.00	0.00	0.00	-0.11	0.00
DAYS TO FLOWER		0.31+	1.00	0.48++	0.00	0.00	0.00	0.00	0.01	0.00
DAYS TO MATURITY		0.82++	0.48++	1.00	0.00	0.00	0.00	0.00	-0.30+	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.11	0.01	-0.30+	0.00	0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
SHATER		0.60++	0.23	0.69++	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		-0.06	-0.25	-0.27+	0.00	0.00	0.00	0.00	-0.26+	0.00
PODS PER PLANT		0.36++	0.48++	0.36++	0.00	0.00	0.00	0.00	0.28+	0.00
100 SEED WEIGHT		-0.17	0.05	-0.24	0.00	0.00	0.00	0.00	0.39++	0.00
QUALITY OF SEED		-0.75++	-0.36++	-0.66++	0.00	0.00	0.00	0.00	0.21	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 116 EXPERIMENT 428 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	2.00	109.50	15.50	13.82	1.00	46.9	21.7
10	COLUMBUS	1.75	107.25	14.75	18.50	1.25	43.8	20.3
15	BONUS	1.00	178.25	18.25	22.14	2.50	44.9	21.4
13	WILLIAMS	1.00	144.00	16.25	19.92	2.75	43.5	21.9
14	CALLAND	1.00	163.50	13.75	22.33	4.25	45.5	20.0
6	CORSOY	1.00	152.75	10.75	17.52	4.25	42.4	20.5
7	BEESON	1.00	133.50	14.50	24.75	4.25	44.3	20.5
11	CLARK 63	1.00	112.00	18.00	20.10	3.00	44.6	20.5
3	HARK	1.00	144.50	13.00	19.96	3.50	45.1	21.6
12	WOODWORTH	1.00	144.00	12.80	19.06	3.25	43.8	22.6
4	HODGSON	1.00	110.50	14.13	18.70	4.75	41.9	23.1
5	ANSOY 71	1.00	139.50	11.50	20.00	5.00	43.0	22.0
2	SHIFT	1.00	143.25	10.63	18.97	4.00	40.8	23.3
8	WELLS	1.00	116.00	12.25	17.05	5.00	43.8	21.7
1	ALTONA	1.00	157.25	8.28	18.47	4.00	40.4	22.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05      +- - PROB=-.01)								
YIELD	KG/HA	0.60++	-0.06	0.36++	-0.17	-0.75++	0.00	0.00
DAYS TO FLOWER	0.23	0.23	-0.25	0.48++	0.05	-0.36++	0.00	0.00
DAYS TO MATURITY	0.69++	-0.27+	0.36++	0.36++	-0.24	-0.66++	0.00	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.26+	0.28+	0.39++	0.21	0.05	0.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	-0.41++	1.00	0.05	-0.42++	-0.57++	0.00	0.00
PLANTS	HARVEST	-0.41++	1.00	-0.10	0.23	0.15	0.00	0.00
PODS PER PLANT	0.05	-0.10	-0.10	1.00	0.16	-0.43++	0.00	0.00
100 SEED WEIGHT	-0.42++	0.23	0.23	1.00	1.00	0.22	0.00	0.00
QUALITY OF SEED	-0.57++	0.15	-0.43++	-0.43++	0.22	1.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 117 EXPERIMENT 465 YEAR 1975

REGION - ASIA  
 SITE - ISLAMABAD  
 LATITUDE - 32 DEG. 25 MIN. N LONGITUDE - 72 DEG. 15 MIN. E  
 COUNTRY - PAKISTAN  
 COOPERATOR - W.H. JUDY  
 DATE PLANTED - JULY 25, 1975  
 DATE HARVESTED - NOVEMBER, 1975  
 FERTILIZER USED (KG/HA) - N 80.0, P 17.6

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	PLANT HEIGHT	LODGING
5	CORB	364.38	62.00	111.00	0.00	0.00	0.00	0.00	39.25	0.00
13	WILLIAMS	363.16	66.50	114.25	0.00	0.00	0.00	0.00	33.75	0.00
1	JUPITER	332.52	62.50	115.75	0.00	0.00	0.00	0.00	45.50	0.00
12	WOODWORTH	316.59	62.25	111.25	0.00	0.00	0.00	0.00	36.50	0.00
12	HAMPTON 266A	316.18	66.50	113.50	0.00	0.00	0.00	0.00	32.50	0.00
10	COLUMBUS	290.44	64.25	115.50	0.00	0.00	0.00	0.00	35.50	0.00
6	BOSSIER	275.33	63.75	117.50	0.00	0.00	0.00	0.00	35.50	0.00
3	HARDEF	273.29	66.00	113.50	0.00	0.00	0.00	0.00	37.75	0.00
11	CLARK 63	234.07	67.00	112.25	0.00	0.00	0.00	0.00	33.00	0.00
8	IMPROVED FELICAN	223.86	64.50	111.75	0.00	0.00	0.00	0.00	45.00	0.00
9	TRACY	213.65	62.75	113.00	0.00	0.00	0.00	0.00	28.00	0.00
15	FORREST	205.88	59.50	107.75	0.00	0.00	0.00	0.00	42.75	0.00
15	SEMMES	184.23	65.50	110.50	0.00	0.00	0.00	0.00	29.25	0.00
14	CALLAND	171.98	64.75	113.25	0.00	0.00	0.00	0.00	34.00	0.00
7	DAVIS	165.03	62.50	115.25	0.00	0.00	0.00	0.00	30.50	0.00
GRAND MEAN										
262.04										
STANDARD ERROR OF A VARIETY MEAN										
43.52										
COEFFICIENT OF VARIATION										
33.21%										
5% LSD VARIETY MEANS (*****=NS)										
124.38										
C C R E E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.06	-0.05	0.00	0.00	0.00	0.00	0.30+	0.00
DAYS TO FLOWER		0.06	1.00	0.30+	0.00	0.00	0.00	0.00	-0.04	0.00
DAYS TO MATURITY		-0.05	0.30+	1.00	0.00	0.00	0.00	0.00	-0.02	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.30+	-0.04	-0.02	0.00	0.00	0.00	0.00	1.00	0.00
LCDGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		-0.05	0.11	-0.04	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST		0.61++	0.07	0.19	0.00	0.00	0.00	0.00	0.02	0.00
POTS PER PLANT		0.18	0.13	0.19	0.00	0.00	0.00	0.00	0.36++	0.00
100 SEED WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 117

EXPERIMENT 465

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	CORB	2.50	102.50	28.50	0.00	0.00
13	WILLIAMS	2.00	81.50	38.00	0.00	0.00
1	JUPITER	2.50	101.25	30.25	0.00	0.00
12	WOODCROTH	2.00	99.50	34.00	0.00	0.00
2	HAWETON 266A	3.25	143.50	30.00	0.00	0.00
10	COLUMBUS	2.00	106.00	37.00	0.00	0.00
6	BOSSIER	2.50	76.50	28.75	0.00	0.00
3	HARDEF	2.25	62.75	37.75	0.00	0.00
11	CLARK 63	2.75	82.75	37.75	0.00	0.00
4	IMPECVFE FELICAN	2.75	99.00	28.25	0.00	0.00
8	TRACY	2.25	40.00	23.75	0.00	0.00
9	FORREST	2.25	85.50	26.75	0.00	0.00
15	SEYMES	3.00	33.75	31.50	0.00	0.00
14	CALLAND	2.00	40.25	33.50	0.00	0.00
7	DAVIS	2.00	61.25	27.50	0.00	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		2.40	81.07	31.55	0.00	0.00
COEFFICIENT OF VARIATION		0.20	13.99	3.62	0.00	0.00
5% LSD VARIETY MEANS (*****=NS)		16.81%	34.52%	22.93%	0.00%	0.00%
		0.58	39.99	*****	0.00	0.00
C C R R E L A T I O N S						
YIELD KG/HA						
DAYS TO	FLCWR	-0.05	0.61++	C.18	0.00	0.00
DAYS TO	MAIURTY	-0.04	0.19	C.13	0.00	0.00
NODULE	NUMBER 1	0.00	0.00	0.19	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	C.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	C.00	0.00	0.00
PLANT	HEIGHT	0.02	0.36++	0.00	0.00	0.00
LODGING		0.00	0.00	0.21	0.00	0.00
SHATTER		1.00	0.00	-C.01	0.00	0.00
PLANTS	HARVEST	0.13	0.00	C.16	0.00	0.00
PODS PER	PLANT	-0.01	0.16	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	0.00	0.00
QUALITY	OF SEED	0.00	0.00	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	1.00

TABLE 118

EXPERIMENT 323

YEAR 1975

REGION - ASIA  
SITE - LAHORECOUNTRY - PAKISTAN  
ELEVATION - 229 M

COOPERATOR - J.R. LOCKMAN

LATITUDE - 31 DEG. 30 MIN. N

LONGITUDE - 74 DEG. 20 MIN. E

DATE PLANTED - JULY 28, 1975

DATE HARVESTED - NOVEMBER, 1975

SOIL TYPE - SILTY LOAM

FERTILIZER USED (KG/HA) - P 24.4

AMOUNT OF MOISTURE - .435 MM

NUMBER OF IRRIGATIONS - 6 (216 MM)

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	BOSSIER	753.75	54.00	111.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
2	HAMPTON 266A	679.87	42.25	105.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
8	TRACY	545.25	42.25	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
13	WILLIAMS	539.87	41.75	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
10	COLUMBUS	523.62	42.25	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
14	CALLAND	496.00	39.75	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
9	FORREST	379.37	39.00	101.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
4	IMPROVED PELICAN	369.12	54.00	107.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
1	JUPITER	350.37	59.00	123.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
5	CORB	311.50	41.25	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
12	WOODWORTH	308.62	42.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
7	DAVIS	289.37	42.00	101.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
3	HARDEE	225.62	52.75	107.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
11	CLARK 63	204.50	42.50	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
15	SEMMES	118.37	42.75	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% LSD VARIETY MEANS (*****=NS)												
CORRELATIONS												
(+ - PROB=.05      +- - PROB=.01)												
YIELD	KG/HA	1.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO FLOWER		0.01	1.00	0.82++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.16	0.82++	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
HARVEST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		-0.28+	0.16	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 118

EXPERIMENT 323

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	BOSSIER	0.00	0.00	0.00	0.00	3.00
2	HAMPTON 266A	0.00	0.00	0.00	0.00	4.00
8	TRACY	0.00	0.00	0.00	0.00	4.00
13	WILLIAMS	0.00	0.00	0.00	0.00	4.00
10	COLUMBUS	0.00	0.00	0.00	0.00	5.00
14	CALLAND	0.00	0.00	0.00	0.00	5.00
9	FORREST	0.00	0.00	0.00	0.00	5.00
4	IMPROVED PELICAN	0.00	0.00	0.00	0.00	5.00
1	JUPITER	0.00	0.00	0.00	0.00	5.00
5	COBB	0.00	0.00	0.00	0.00	5.00
12	WOODWORTH	0.00	0.00	0.00	0.00	5.00
7	DAVIS	0.00	0.00	0.00	0.00	5.00
3	HARDEE	0.00	0.00	0.00	0.00	5.00
11	CLARK 63	0.00	0.00	0.00	0.00	3.00
15	SEMMES	0.00	0.00	0.00	0.00	5.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	0.00	0.00	0.00	4.33
COEFFICIENT OF VARIATION		0.00%	0.00%	0.00%	0.00%	0.00%
5% LSD VARIETY MEANS (*****=NS)		0.00	0.00	0.00	0.00	0.00
C O R R E L A T I O N S						
		(+ - PROB=.05			++ - PROB=.01)	
YIELD	KG/HA	0.00	0.00	0.00	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	1.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00
DISEASE I		0.00	0.00	0.00	0.00	1.00
DISEASE II		0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	1.00

TABLE 119

EXPERIMENT 471

YEAR 1975

REGION - ASIA  
 SITE - IYALLEUR  
 LATITUDE - 31 DEG. 26 MIN. N  
 CCCEPATOR - CILSIEDS BCANIST  
 DATE PLANTED - SEPTEMBER 8, 1975  
 SOIL TYPE - SANDY LCAM  
 FERTILIZER USED (KG/HA) - N 22.4, P 44.8  
 NUMBER OF IFFICATIONS - 3 (254 MM)

CCUNTRY - PAKISTAN  
 ELEVATION - 184 M  
 LONGITUDE - 73 DEG. 6 MIN. E  
 DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CRCS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURE	NO. NODULE NUMBER 1	NO. NODULE NUMBER 2	NO. NODULE WEIGHT 1	NO. NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	745.11	25.50	72.50	0.00	0.00	0.00	0.00	14.30	0.00
11	CLARK 63	514.28	29.00	80.00	0.00	0.00	0.00	0.00	10.25	0.00
7	DAVIS	514.28	27.00	77.00	0.00	0.00	0.00	0.00	13.85	0.00
5	COBB	486.77	27.50	77.50	0.00	0.00	0.00	0.00	13.30	0.00
15	SEWES	480.79	26.50	79.00	0.00	0.00	0.00	0.00	11.20	0.00
12	WOODWORTH	440.13	26.50	77.50	0.00	0.00	0.00	0.00	12.00	0.00
13	WILLIAMS	435.34	29.00	79.50	0.00	0.00	0.00	0.00	11.75	0.00
3	HARDEE	376.74	25.00	76.50	0.00	0.00	0.00	0.00	11.75	0.00
1	JUPIER	376.74	29.00	76.00	0.00	0.00	0.00	0.00	11.40	0.00
10	COLUMBUS	373.15	28.00	78.50	0.00	0.00	0.00	0.00	11.75	0.00
6	ROSSIER	340.86	26.50	72.00	0.00	0.00	0.00	0.00	10.95	0.00
2	HAMETON 266A	334.88	30.00	76.00	0.00	0.00	0.00	0.00	10.30	0.00
8	TRACY	279.86	27.50	75.00	0.00	0.00	0.00	0.00	9.75	0.00
9	FORREST	272.69	26.00	75.00	0.00	0.00	0.00	0.00	11.55	0.00
14	CALLAND	239.20	29.50	80.50	0.00	0.00	0.00	0.00	12.80	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C E R R E L A T I O N S										
(+ - PROB=.05      +- - EROB=.01)										
YIELD	KG/HA	1.00	-0.24	0.02	0.00	0.00	0.00	0.00	0.41+	0.00
DAYS TO FLOWER	1.00	-0.24	1.00	0.55+	0.00	0.00	0.00	0.00	-0.43+	0.00
DAYS TO MATURE	0.02	0.02	0.55+	1.00	0.00	0.00	0.00	0.00	-0.20	0.00
NO. NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NO. NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NO. NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NO. NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.41+	-0.43+	-0.20	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.04	-0.64+	-0.59+	0.00	0.00	0.00	0.00	0.00	0.70+	0.00
100 SEED WEIGHT	0.15	0.17	0.30	0.00	0.00	0.00	0.00	0.00	-0.23	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 119 EXPERIMENT 471 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
4	TMEROVE FELICAN	2.00	0.00	10.85	13.75	0.00
11	CLARK 63	2.00	0.00	6.90	15.25	0.00
7	DAVIS	2.00	0.00	10.10	14.25	0.00
5	COBB	2.00	0.00	8.80	14.00	0.00
15	SEMMES	2.00	0.00	8.70	14.75	0.00
12	WOODKCRTH	2.00	0.00	9.45	13.00	0.00
13	WILLIAMS	2.00	0.00	8.65	12.75	0.00
3	HARDEE	2.00	0.00	9.60	13.00	0.00
1	JUPITER	2.00	0.00	9.15	11.75	0.00
19	COLUMBUS	2.00	0.00	10.50	13.00	0.00
6	BOSSIER	2.00	0.00	10.80	12.25	0.00
2	HAMPTON 266A	2.00	0.00	8.80	12.00	0.00
8	TRACY	2.00	0.00	8.50	14.75	0.00
9	FORREST	2.00	0.00	10.80	11.75	0.00
14	CALLAND	2.00	0.00	10.30	12.25	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		2.00	0.00	9.46	13.23	0.00
COEFFICIENT OF VARIATION		0.00	0.00	1.54	0.90	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	0.00	22.98%	9.60%	0.00%
C C R E L A T I O N S						
				(+ - PROB=.05		++ - PROB=.01)
YIELD	KG/HA	0.00	0.00	0.04	0.15	0.00
DAYS TO FLOWER	0.00	0.00	0.00	-0.64++	0.17	0.00
DAYS TO MATURITY	0.00	0.00	0.00	-0.59++	0.30	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00
NODULE HEIGHT	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	0.00	0.00	0.00	0.70++	-0.23	0.00
LOGGING	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00
PLANTS	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT	0.00	0.00	0.00	1.00	-0.47++	0.00
QUALITY OF SEED	0.00	0.00	0.00	-0.47++	1.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00
						1.00



TABLE 120

EXPERIMENT 41

YEAR 1975

REGION - ASIA  
 SITE - RAWALPINDI  
 LATITUDE - 32 DEG. 25 MIN. N  
 CCOPERATOR - CILS/FELS BOTANIST  
 DATE PLANTED - JULY 8, 1975  
 CCOUNTRY - PAKISTAN  
 LONGITUDE - 72 DEG. 15 MIN. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	CALLAND	1256.96	41.75	98.25	0.00	0.00	0.00	0.00	68.61	1.00
9	FORREST	1242.96	41.75	106.00	0.00	0.00	0.00	0.00	62.16	1.00
10	HILL	1088.97	43.25	101.00	0.00	0.00	0.00	0.00	65.26	1.00
6	BRAGG	1023.65	36.50	94.00	0.00	0.00	0.00	0.00	38.13	1.25
11	CLARK 63	1023.56	42.25	98.75	0.00	0.00	0.00	0.00	67.56	1.00
7	DAVIS	926.16	34.25	94.00	0.00	0.00	0.00	0.00	58.23	1.00
3	HARDEE	926.07	35.50	95.00	0.00	0.00	0.00	0.00	47.34	1.00
15	SEMMES	926.07	43.75	106.00	0.00	0.00	0.00	0.00	80.26	1.00
13	WILLIAMS	853.00	43.75	95.50	0.00	0.00	0.00	0.00	63.78	1.00
5	BOSSIER	779.84	33.25	94.00	0.00	0.00	0.00	0.00	57.87	1.00
12	BONUS	731.09	41.25	95.00	0.00	0.00	0.00	0.00	55.62	1.00
4	IMPROVED PELICAN	719.01	32.00	81.75	0.00	0.00	0.00	0.00	42.55	1.00
8	TRACY	706.68	37.50	94.00	0.00	0.00	0.00	0.00	44.88	1.00
2	HAMETON 266A	659.93	31.25	79.00	0.00	0.00	0.00	0.00	41.28	1.00
1	JUPITER	422.37	32.00	89.00	0.00	0.00	0.00	0.00	46.44	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		885.76	38.00	94.75	0.00	0.00	0.00	0.00	56.00	1.02
COEFFICIENT OF VARIATION		158.47	1.06	0.66	0.00	0.00	0.00	0.00	4.46	0.06
5% LSD VARIETY MEANS (*****=NS)		35.78%	5.59%	1.33%	0.00%	0.00%	0.00%	0.00%	15.93%	12.70%
		452.94	3.03	1.88	0.00	0.00	0.00	0.00	12.75	*****
C C E R E L A T I O N S										
(+ - PROB=.05      +- PROB=.01)										
YIELD	KG/HA	1.00	0.31+	0.40++	0.00	0.00	0.00	0.00	0.45++	0.11
DAYS TO FLOWER		0.31+	1.00	0.74++	0.00	0.00	0.00	0.00	0.58++	-0.16
DAYS TO MATURITY		0.40++	0.74++	1.00	0.00	0.00	0.00	0.00	0.64++	-0.01
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	0.45++	0.58++	0.64++	0.00	0.00	0.00	0.00	1.00	-0.18
LCDGING		0.11	-0.16	-0.01	0.00	0.00	0.00	0.00	-0.18	1.00
SHAFTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.42++	0.02	0.17	0.00	0.00	0.00	0.00	-0.09	0.23
PODS PER PLANT		0.63++	0.46++	0.56++	0.00	0.00	0.00	0.00	0.70++	-0.03
100 SEED WEIGHT		-0.06	-0.32+	-0.35++	0.00	0.00	0.00	0.00	-0.22	0.01
QUALITY OF SEED		0.19	0.04	-0.04	0.00	0.00	0.00	0.00	0.12	0.04
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 120

EXPERIMENT 41

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PCDS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	CALLAND	0.00	60.25	48.73	17.70	2.00
9	FORREST	0.00	84.50	46.45	11.08	2.25
10	HILL	0.00	64.50	30.80	14.80	3.00
6	BRAGG	0.00	106.00	19.00	15.00	3.00
11	CLARK 63	0.00	39.25	38.75	16.43	3.75
7	DAVIS	0.00	85.25	18.80	19.73	2.75
3	HARDEE	0.00	95.75	20.30	16.33	3.00
15	SEMMES	0.00	83.00	49.15	7.00	3.00
13	WILLIAMS	0.00	63.25	23.45	17.18	3.00
5	BOSSIER	0.00	62.25	26.45	16.28	2.75
12	BONUS	0.00	59.50	24.45	15.73	3.25
4	IMPROVEL PELICAN	0.00	63.00	18.95	14.50	3.75
8	TRACY	0.00	69.75	19.70	15.95	2.00
2	HAMETCN 266A	0.00	49.00	19.50	14.98	2.50
1	JUPIER	0.00	58.75	13.20	17.50	1.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
C C R E I A T I O N S						
(+ - PROB=.05      +- - PROB=.01)						
YIELD	KG/HA	0.00	0.42++	0.63++	-0.06	0.19
DAYS TO FLOWER		0.00	0.02	0.46++	-0.32+	0.00
DAYS TO MATURITY		0.00	0.17	0.56++	-0.35++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
HEIGHT		0.00	-0.09	0.70++	-0.22	0.00
LODGING		0.00	0.23	-0.03	0.01	0.12
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.00	0.00	0.00
PCDS PER PLANT		0.00	-0.12	1.00	0.05	0.00
100 SEED WEIGHT		0.00	-0.05	-0.40++	1.00	0.00
QUALITY OF SEED		0.00	0.02	0.05	-0.11	0.00
DISEASE I		0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	1.00
					0.00	0.00
					0.00	1.00

TABLE 121 EXPERIMENT 348 YEAR 1975

REGION - ASIA  
 SITE - SWAT  
 LATITUDE - 34 DEG. 46 MIN. N  
 COOPERATOR - SYEE BADSHAH  
 DATE PLANTED - JULY 7, 1975  
 SOIL TYPE - CLAY LCAM, PH 7.5  
 FERTILIZER USED (KG/HA) - N 69.7, P 62.0  
 AMOUNT OF MOISTURE - 368 MM  
 NUMBER OF IRRIGATIONS - 6  
 SUBSTITUTE VARIETY - LEE 68

COUNTRY - PAKISTAN  
 ELEVATION - 895 M  
 LONGITUDE - 72 DEG. 21 MIN. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
12	WILLIAMS	3578.97	45.00	101.00	0.00	0.00	0.00	0.00	71.25	2.00
14	LEE 68	3508.13	52.75	131.00	0.00	0.00	0.00	0.00	57.00	3.00
10	CLARK 63	3472.64	45.75	101.00	0.00	0.00	0.00	0.00	76.00	2.00
6	DAVIS	3378.17	56.50	131.00	0.00	0.00	0.00	0.00	80.00	3.00
11	WOODCRTH	3307.25	46.00	101.00	0.00	0.00	0.00	0.00	64.00	2.00
4	COBB	3071.09	56.50	133.00	0.00	0.00	0.00	0.00	79.50	3.00
7	TRACY	2952.94	52.75	131.00	0.00	0.00	0.00	0.00	67.25	3.00
9	COLUMBUS	2822.99	48.50	112.00	0.00	0.00	0.00	0.00	82.50	2.00
13	CALLAND	2752.14	45.75	112.00	0.00	0.00	0.00	0.00	73.75	3.00
1	HAMPTON 266A	2267.81	57.00	142.00	0.00	0.00	0.00	0.00	86.00	3.00
8	FORREST	2173.28	48.75	133.00	0.00	0.00	0.00	0.00	71.00	3.00
5	BOSSIER	2067.01	58.75	131.00	0.00	0.00	0.00	0.00	86.00	3.00
2	HARDEE	1889.82	73.00	142.00	0.00	0.00	0.00	0.00	89.50	3.00
3	IMPROVED PELICAN	1511.83	75.50	142.00	0.00	0.00	0.00	0.00	122.00	5.00
GRAND MEAN										
2768.15										
STANDARD ERROR OF A VARIETY MEAN										
125.00										
COEFFICIENT OF VARIATION										
9.03%										
5% LSD VARIETY MEANS (*****=NS)										
357.25										
C C R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=-.01)										
YIELD	KG/HA	1.00	-0.69++	-0.63++	0.00	0.00	0.00	0.00	-0.70++	-0.65+
DAYS TO FLOWER	1.00	-0.69++	1.00	0.77++	0.00	0.00	0.00	0.00	0.77++	0.77++
DAYS TO MATURITY	-0.63++	-0.63++	0.77++	1.00	0.00	0.00	0.00	0.00	0.46++	0.75+
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	-0.70++	0.77++	0.46++	0.00	0.00	0.00	0.00	1.00	0.70++
LODGING	-0.65++	-0.65++	0.77++	0.75++	0.00	0.00	0.00	0.00	0.70++	1.00
SHATTER	0.51++	-0.59++	-0.67++	-0.67++	0.00	0.00	0.00	0.00	-0.31+	-0.34+
HARVEST	-0.00	0.20	0.40++	0.40++	0.00	0.00	0.00	0.00	0.04	0.27+
PLANT	-0.10	0.04	0.14	0.14	0.00	0.00	0.00	0.00	-0.19	0.13
PODS PER 100 SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED	-0.35++	-0.35++	-0.22	-0.06	0.00	0.00	0.00	0.00	0.54++	0.25
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(CONTINUED)

EXPERIMENT	348	YEAR 1975
1	100	100
2	100	100
3	100	100
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90	100	100
91	100	100
92	100	100
93	100	100
94	100	100
95	100	100
96	100	100
97	100	100
98	100	100
99	100	100
100	100	100

TABLE 121

ENTRY NUMBER	VARIETY OR CHC8S	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
12	WILLIAMS	3.00	98.50	55.25	0.00	2.00
14	LEE 68	2.50	130.25	65.25	0.00	1.00
10	CLARK 63	2.75	75.25	55.25	0.00	3.00
6	DAVIS	2.00	148.75	45.00	0.00	1.00
11	WOODNCRTH	2.75	69.00	48.25	0.00	1.00
4	COBB	3.00	127.25	35.00	0.00	2.00
7	TRACY	1.75	123.25	64.50	0.00	2.00
9	COLUMBUS	3.00	127.25	36.75	0.00	2.00
13	CALLAND	3.50	139.25	40.75	0.00	3.00
1	HAMPTCN 266A	1.00	104.25	40.00	0.00	2.00
8	FORREST	2.25	106.00	74.00	0.00	1.00
5	BOSSIER	2.00	110.75	63.50	0.00	3.00
2	HARDEE	1.00	124.75	55.00	0.00	2.00
2						
3	IMPROVED PELICAN	2.00	107.00	53.75	0.00	3.00
	GRAND MEAN	2.32	113.68	52.30	0.00	2.00
	STANDARD ERROF OF A VARIETY MEAN	0.21	7.80	2.97	0.00	0.00
	COEFFICIENT OF VARIATION	18.16%	13.73%	11.34%	0.00%	0.00%
5%	LSD VARIETY MEANS (***)=NS)	0.60	22.30	8.48	0.00	0.00
<b>C O R R E L A T I O N S</b>						
(+ - PROB=-.05	+ + - PROB=.01)					
YIELD	KG/Ha	0.51++	-0.00	-0.10	0.00	0.00
DAYS TO FLOWER		-0.59++	0.20	0.04	0.00	0.00
DAYS TO MATURITY		-0.67++	0.40++	0.14	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE HEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE HEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT LODGING	HEIGHT	-0.31+	0.04	-0.19	0.00	0.00
SHATTER		-0.34++	0.27+	0.13	0.00	0.54++
HARVEST PLANT		-0.04	-0.04	-0.18	0.00	0.25
100 SEED WEIGHT		-0.18	-0.19	-0.19	0.00	0.00
QUALITY OF SEED		0.00	0.00	1.00	0.00	0.00
DISEASE I		0.09	-0.08	-0.14	0.00	1.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	1.00
		0.00	0.00	0.00	0.00	0.00



TABLE 122 EXPERIMENT 466 YEAR 1975

REGION - ASIA  
 SITE - TAMDCJAM  
 LATITUDE - 25 DEG. 2 MIN. N  
 COOPERATORS - A.F. CLAUDREY, M.A. JALEEL, V.N. AHMED  
 DATE PLANTED - JULY 18, 1975  
 SOIL TYPE - SANDY LCM  
 FERTILIZER USED (KG/HA) - N 61.0, P 83.0  
 NUMBER OF IRRIGATIONS - 4  
 LOCAL VARIETY - LPEA

COUNTRY - PAKISTAN  
 ELEVATION - 19 M  
 LONGITUDE - 63 DEG. 38 MIN. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO Maturity	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	CALLAND	1541.97	27.50	90.00	0.00	0.00	0.00	0.00	45.03	0.00
9	FORREST	1521.14	30.00	90.25	0.00	0.00	0.00	0.00	28.68	0.00
10	COLUMBUS	1437.79	27.75	91.00	0.00	0.00	0.00	0.00	39.45	0.00
11	CLARK 63	1062.71	28.50	90.50	0.00	0.00	0.00	0.00	36.15	0.00
12	WOODWORTH	896.01	27.75	89.25	0.00	0.00	0.00	0.00	30.20	0.00
15	LAPPA	791.82	30.00	85.75	0.00	0.00	0.00	0.00	38.48	0.00
13	WILLIAMS	729.31	27.75	90.00	0.00	0.00	0.00	0.00	33.05	0.00
5	AMSOY 71	708.47	28.25	90.25	0.00	0.00	0.00	0.00	25.18	0.00
8	WELLS	708.47	28.00	87.75	0.00	0.00	0.00	0.00	24.18	0.00
7	BEESCA	541.77	28.00	90.25	0.00	0.00	0.00	0.00	28.15	0.00
3	HARK	520.94	27.25	88.75	0.00	0.00	0.00	0.00	20.88	0.00
6	CORSCY	479.26	27.50	90.75	0.00	0.00	0.00	0.00	18.55	0.00
4	HODGSON	354.24	28.25	87.25	0.00	0.00	0.00	0.00	19.30	0.00
2	SWIFT	312.56	26.50	79.50	0.00	0.00	0.00	0.00	24.43	0.00
1	ALTONA	208.37	28.25	79.50	0.00	0.00	0.00	0.00	29.70	0.00
GRAND MEAN		787.66	28.08	88.05	0.00	0.00	0.00	0.00	29.42	0.00
STANDARD ERROR OF A VARIETY MEAN		156.61	0.40	1.01	0.00	0.00	0.00	0.00	2.75	0.00
COEFFICIENT OF VARIATION		39.77%	2.85%	2.29%	0.00%	0.00%	0.00%	0.00%	18.72%	0.00%
5% LSD VARIETY MEANS (*****=NS)		447.61	1.14	2.89	0.00	0.00	0.00	0.00	7.87	0.00
C C R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.06	0.31+	0.00	0.00	0.00	0.00	0.69++	0.00
DAYS TO FLOWER		0.06	1.00	0.14	0.00	0.00	0.00	0.00	0.03	0.00
DAYS TO MATURITY		0.31+	0.14	1.00	0.00	0.00	0.00	0.00	0.07	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.69++	0.03	0.07	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.53++	0.00	-0.18	0.00	0.00	0.00	0.00	0.33++	0.00
PLANTS PER PLANT		0.82++	0.11	0.38++	0.00	0.00	0.00	0.00	0.70++	0.00
100 SEED WEIGHT		-0.36++	-0.42++	0.12	0.00	0.00	0.00	0.00	-0.16	0.00
QUALITY OF SEED		-0.14	0.17	-0.21	0.00	0.00	0.00	0.00	-0.26+	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 122

EXFLEMENT 466

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OF CRCS	SHATTER	PLANTS HARVEST	PCDS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	CALLAND	0.00	93.00	33.78	15.88	2.50
9	FORREST	0.00	77.50	38.90	11.33	4.50
10	COLUMBUS	0.00	64.75	38.60	15.50	2.00
11	CLARK 63	0.00	58.25	32.73	15.73	2.00
12	WOODWORTH	0.00	76.50	25.30	14.80	2.50
15	LAPPA	0.00	69.00	21.40	11.38	2.00
13	WILLIAMS	0.00	71.75	28.00	15.83	2.50
5	AMSOY 71	0.00	65.00	20.43	16.18	2.50
8	WELLS	0.00	74.50	20.33	15.30	2.25
7	BEESON	0.00	54.25	24.68	19.78	3.50
3	HARK	0.00	57.25	16.08	15.85	2.50
6	CORSCY	0.00	71.25	18.10	15.83	2.00
4	HODGSON	0.00	73.00	15.00	15.50	2.75
2	SWIFT	0.00	71.75	14.48	14.45	3.00
1	ALTCNA	0.00	58.75	14.73	17.50	3.75
GRAND MEAN						
		0.00	69.10	24.17	15.39	2.68
STANDARD ERROR OF A VARIETY MEAN						
		0.00	10.95	3.14	0.46	0.24
COEFFICIENT OF VARIATION						
		0.00%	31.70%	26.03%	6.02%	18.06%
5% LSD VARIETY MEANS (*****=NS)						
		0.00	*****	8.99	1.32	0.69
C C R E L A T I O N S						
		(+ - PROF=.05		+ - PROB=.01)		
YIELD	KG/HA	0.00	0.53++	0.82++	-0.36++	0.00
DAYS TO	FICHER	0.00	0.00	0.11	-0.42++	0.00
DAYS TO	MATURITY	0.00	-0.18	C.38++	0.12	-0.21
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	C.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	C.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.33++	0.70++	-0.16	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.36++	-0.36++	0.00
PCDS PER	PLANT	0.00	0.36++	1.00	-0.20	0.00
100 SEED	WEIGHT	0.00	-0.36++	-C.20	1.00	0.02
QUALITY	OF SEED	0.00	-0.36++	-C.11	1.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	1.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	1.00
						0.00

TABLE 123 EXPERIMENT 432 YEAR 1975

REGION - ASIA  
 SITE - TANDOJAM  
 LATITUDE - 25 DEG. 2 MIN. N  
 COOPERATORS - A.H. CHAUDHRY, M.A. JALEEL, V.N. AHMED  
 DATE PLANTED - JULY 19, 1975  
 SOIL TYPE - SANDY LOAM  
 FERTILIZER USED (KG/HA) - N 61.0, P 83.0  
 NUMBER OF IRRIGATIONS - 4  
 SUBSTITUTE VARIETY - HAMPTON 266

COUNTRY - PAKISTAN

ELEVATION - 19 M

LONGITUDE - 63 DEG. 38 MIN. E

DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
2	HAMPTON 266A	2688.04	42.00	102.25	0.00	0.00	0.00	0.00	39.23	0.00
5	COBB	2625.52	38.00	106.00	0.00	0.00	0.00	0.00	54.88	0.00
6	BOSSIER	2437.99	38.00	101.25	0.00	0.00	0.00	0.00	38.53	0.00
9	FORREST	2312.96	31.00	91.00	0.00	0.00	0.00	0.00	32.18	0.00
10	COLUMBUS	2229.61	28.00	91.00	0.00	0.00	0.00	0.00	53.53	0.00
3	HARDEE	2229.61	43.00	103.75	0.00	0.00	0.00	0.00	70.15	0.00
14	CALLAND	2000.40	28.00	89.50	0.00	0.00	0.00	0.00	55.90	0.00
15	HAMPTON 266	1958.72	38.00	99.25	0.00	0.00	0.00	0.00	38.75	0.00
11	CLARK 63	1937.89	28.00	89.25	0.00	0.00	0.00	0.00	49.95	0.00
8	TRACY	1917.05	36.00	91.00	0.00	0.00	0.00	0.00	37.78	0.00
13	WILLIAMS	1875.37	26.00	88.50	0.00	0.00	0.00	0.00	52.00	0.00
1	JUPITER	1771.19	49.00	114.00	0.00	0.00	0.00	0.00	73.87	0.00
12	WOODWORTH	1708.67	26.00	86.00	0.00	0.00	0.00	0.00	44.85	0.00
7	DAVIS	1687.84	36.00	96.00	0.00	0.00	0.00	0.00	29.88	0.00
4	IMPROVED PELICAN	1333.60	43.00	100.00	0.00	0.00	0.00	0.00	110.15	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2047.63	35.33	96.58	0.00	0.00	0.00	0.00	52.11	0.00
COEFFICIENT OF VARIATION		193.92	0.00	1.09	0.00	0.00	0.00	0.00	3.21	0.00
5% LSD VARIETY MEANS (*****=NS)		18.94%	0.00	2.27%	0.00	0.00	0.00	0.00	12.34%	0.00
		561.66	0.00	3.17	0.00	0.00	0.00	0.00	9.31	0.00
C O R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.03	0.10	0.00	0.00	0.00	0.00	-0.25	0.00
DAYS TO FLOWER		0.03	1.00	0.90++	0.00	0.00	0.00	0.00	0.39++	0.00
DAYS TO MATURITY		0.10	0.90++	1.00	0.00	0.00	0.00	0.00	0.33+	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.25	0.39++	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.33+	0.00	0.00	0.00	0.00	1.00	0.00
SHATIER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST		-0.05	-0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.11	0.22	-0.41++	0.00	0.00	0.00	0.00	0.13	0.00
100 SEED WEIGHT		0.27	0.04	0.00	0.00	0.00	0.00	0.00	0.07	0.00
QUALITY OF SEED		-0.27	-0.33+	0.00	0.00	0.00	0.00	0.00	-0.45++	0.00
DISEASE I		0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.16	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 123

EXPERIMENT 432

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
2	HAMPTON 266A	0.00	58.75	37.28	15.50	1.50
5	COBR	0.00	62.50	40.63	13.20	1.25
6	BOSSIER	0.00	62.00	39.05	13.23	1.00
9	FORREST	0.00	66.50	51.48	11.65	2.75
10	COLUMBUS	0.00	80.00	35.90	14.50	1.50
3	HARDEE	0.00	68.50	52.08	11.55	1.50
14	CALLAND	0.00	65.50	43.65	16.28	1.50
15	HAMPTON 266A (S)	0.00	58.50	53.90	13.10	1.50
11	CLARK 63	0.00	68.00	45.40	14.65	1.50
8	TRACY	0.00	77.50	66.75	14.85	1.50
13	WILLIAMS	0.00	70.75	43.28	14.60	1.50
1	JUPITER	0.00	63.75	55.15	12.73	2.25
12	WOODWORTH	0.00	94.50	34.70	14.50	1.25
7	DAVIS	0.00	80.00	37.88	14.93	1.25
4	IMPROVED PELICAN	0.00	81.75	42.98	10.18	2.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
C O R R E L A T I O N S						
(+ - PROB=.05      ++ - PROB=.01)						
YIELD	KG/HA	0.00	-0.05	0.11	0.27	-0.27
DAYS TO FLOWER		0.00	-0.24	0.22	-0.44++	0.13
DAYS TO MATURITY		0.00	-0.41++	0.04	-0.33+	0.05
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.13	0.07	-0.45++	0.16
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.00	0.00	0.00
PLANTS	PER PLANT	0.00	-0.05	-0.05	-0.03	-0.03
PODS PER PLANT		0.00	-0.05	1.00	-0.08	0.23
100 SEED WEIGHT		0.00	-0.03	-0.08	1.00	-0.40++
QUALITY OF SEED		0.00	-0.03	0.23	-0.40++	1.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00

TABLE 124 EXPERIMENT 464 YEAR 1975

REGION - ASIA COUNTRY - PHILIPPINES  
 SITE - LA CARLOTA ELEVATION - 74 M  
 LATITUDE - 10 DEG. 24 MIN. N LONGITUDE - 122 DEG. 59 MIN. E  
 COOPERATOR - UPLBCA RESEARCH AND TRAINING STATION  
 DATE PLANTED - JULY 2, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - CLAY  
 FERTILIZER USED (KG/HA) - N 45.0, P 45.0, K 45.0  
 AMOUNT OF MOISTURE - 112623 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
12	WOODWORTH	1021.45	30.00	83.00	10.50	16.00	0.00	0.00	47.75	1.00
3	HARDEE	929.35	37.00	96.00	12.00	39.50	0.00	0.00	36.25	1.00
14	CALLAND	888.09	30.00	89.00	13.50	37.75	0.00	0.00	49.75	1.25
10	COLUMBUS	846.00	30.00	89.00	14.25	35.25	0.00	0.00	44.00	1.00
13	WILLIAMS	816.00	30.00	89.00	8.00	30.75	0.00	0.00	45.25	1.25
5	COBB	798.91	37.00	96.00	11.00	30.75	0.00	0.00	40.50	1.25
8	TRACY	780.99	30.00	89.00	14.00	23.00	0.00	0.00	32.50	1.00
7	DAVIS	779.32	30.00	89.00	4.50	17.00	0.00	0.00	38.00	1.00
9	FORREST	753.90	30.00	89.00	12.00	21.50	0.00	0.00	40.00	1.25
6	BOSSIER	705.97	30.00	89.00	11.00	48.00	0.00	0.00	29.25	1.00
15	SEMES	695.14	30.00	89.00	7.75	18.75	0.00	0.00	32.00	1.00
4	IMPROVED PELICAN	685.97	37.00	96.00	4.00	26.00	0.00	0.00	80.00	1.75
11	CLARK 63	633.46	30.00	89.00	8.25	23.75	0.00	0.00	43.25	1.00
2	HAPTON 266A	621.37	30.00	89.00	11.50	40.50	0.00	0.00	35.00	1.00
1	JUPITER	580.12	45.00	104.00	4.00	20.75	0.00	0.00	75.00	1.25
GRAND MEAN		769.07	32.40	91.00	9.75	28.62	0.00	0.00	44.57	1.13
STANDARD ERROR OF A VARIETY MEAN		98.33	0.00	0.00	3.40	7.95	0.00	0.00	2.06	0.15
COEFFICIENT OF VARIATION		25.57%	0.00%	0.00%	69.84%	55.55%	0.00%	0.00%	9.23%	26.66%
5% LSD VARIETY MEANS (*****=NS)		*****	0.00	0.00	*****	*****	0.00	0.00	5.88	*****
C O R R E L A T I O N S										
			(+ - PROB=.05		+ - PROB=.01)					
YIELD	KG/HA	1.00	-0.15	-0.23	0.34++	0.14	0.00	0.00	-0.10	-0.07
DAYS TO FLOWER		-0.15	1.00	0.95++	-0.22	-0.03	0.00	0.00	0.65++	0.27+
DAYS TO MATURITY		-0.23	0.95++	1.00	-0.21	0.02	0.00	0.00	0.57++	0.27+
NODULE NUMBER 1		0.34++	-0.22	-0.21	1.00	0.47++	0.00	0.00	-0.22	-0.06
NODULE NUMBER 2		0.14	-0.03	0.02	0.47++	1.00	0.00	0.00	-0.09	-0.23
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.10	0.65++	0.57++	-0.22	-0.09	0.00	0.00	1.00	0.39++
LODGING		-0.07	0.27+	0.27+	-0.06	-0.23	0.00	0.00	0.39++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.08	-0.05	-0.08	-0.10	-0.04	0.00	0.00	0.12	0.06
PODS PER PLANT		-0.12	0.50++	0.45++	-0.41++	-0.22	0.00	0.00	0.38++	0.18
100 SEED WEIGHT		0.13	-0.50++	-0.43++	0.35++	0.12	0.00	0.00	-0.50++	-0.30+
QUALITY OF SEED		-0.23	0.42++	0.41++	-0.25+	-0.21	0.00	0.00	0.21	0.10
DISEASE I		0.13	-0.08	-0.16	0.07	0.17	0.00	0.00	-0.24	-0.04
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
12	WOODWORTH	1.00	197.50	19.50	14.50	2.25	39.2	26.6
3	HARDEE	1.00	131.25	28.00	15.50	2.50	43.7	25.6
14	CALLAND	1.00	147.75	16.25	18.00	3.00	41.2	25.5
10	COLUMBUS	1.00	176.00	16.75	18.00	2.25	43.5	25.7
13	WILLIAMS	1.00	183.50	15.75	17.25	1.00	41.5	25.8
5	COBB	1.00	159.50	20.25	16.50	2.75	40.8	25.9
8	TRACY	1.00	178.75	12.75	17.00	3.75	42.2	24.9
7	DAVIS	1.00	212.75	20.50	13.50	2.50	43.7	24.4
9	FORREST	1.00	204.00	19.00	12.50	2.00	41.3	24.5
6	BOSSIER	1.00	173.00	17.75	15.25	1.75	44.5	23.9
15	SEMMES	1.00	205.75	17.50	15.00	2.75	42.1	25.8
4	IMPROVED PELICAN	1.00	208.50	26.25	11.25	2.50	42.8	24.2
11	CLARK 63	1.00	128.00	20.25	17.50	3.25	41.7	26.4
2	HAMPTON 266A	1.00	201.75	16.75	16.25	3.25	40.1	26.2
1	JUPITER	1.00	191.25	23.25	11.00	5.00	46.6	20.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	179.95	19.37	15.27	2.70		
COEFFICIENT OF VARIATION		0.00	13.99	2.02	0.64	0.43		
5% LSD VARIETY MEANS (*****=NS)		0.00	15.55%	20.83%	8.43%	31.65%		
		0.00	39.99	5.77	1.84	1.22		
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.08	-0.12	0.13	-0.23	0.13	0.00
DAYS TO	FLOWER	0.00	-0.05	0.50++	-0.50++	0.42++	-0.08	0.00
DAYS TO	MATURITY	0.00	-0.08	0.45++	-0.43++	0.41++	-0.16	0.00
NODULE	NUMBER 1	0.00	-0.10	-0.41++	0.35++	-0.25+	0.07	0.00
NODULE	NUMBER 2	0.00	-0.04	-0.22	0.12	-0.21	0.17	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.12	0.38++	-0.50++	0.21	0.24	0.00
LODGING	HEIGHT	0.00	0.06	0.18	-0.30+	0.10	-0.04	0.00
SHATTER	HEIGHT	1.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	PLANT	0.00	1.00	-0.27+	-0.35++	-0.11	0.49++	0.00
PLANTS	PER	0.00	-0.27+	1.00	-0.38++	0.10	-0.21	0.00
100 SEED	WEIGHT	0.00	-0.35++	-0.38++	1.00	-0.17	-0.31+	0.00
QUALITY	OF SEED	0.00	-0.11	0.10	-0.17	1.00	0.04	0.00
DISEASE	I	0.00	0.49++	-0.21	-0.31+	0.04	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 125 EXPERIMENT 601 YEAR 1975

REGION - ASIA COUNTRY - PHILIPPINES  
 SITE - LA CARLOTA ELEVATION - 74 M  
 LATITUDE - 10 DEG. 24 MIN. N LONGITUDE - 122 DEG. 59 MIN. E  
 COOPERATOR - UPLPCA RESEARCH AND TRAINING STATION  
 DATE PLANTFD - JULY 7, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - CLAY  
 FERTILIZER USED (KG/HA) - N 45.0, P 45.0, K 45.0  
 AMOUNT OF MOISTURE - 102057 MM  
 SUBSTITUTE VARIETY - LINCOLN  
 LOCAL VARIETIES - MULTIVAR 80, KAOHSIUNG E-32, TAINUNG 4, CES-16-17,  
 S.J.1, TK-5, ORBA

ENTRY NUMBER	VARIETY OR CROSS	YIPID KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	KAOHSIUNG E-32	2069.16	44.00	107.00	225.25	242.50	0.00	0.00	85.00	2.00
17	ORBA	1996.65	44.00	107.00	201.25	323.75	0.00	0.00	96.75	3.00
11	CLARK 63	1524.05	40.00	94.00	163.25	245.75	0.00	0.00	52.00	2.75
16	TK-5	1441.95	33.00	87.00	100.50	210.25	0.00	0.00	60.50	1.00
8	TAINUNG 4	1432.37	37.00	91.00	276.75	247.50	0.00	0.00	57.25	2.25
10	CES-16-17	1406.95	37.00	91.00	156.50	195.25	0.00	0.00	70.50	1.50
1	ALTONA	1387.78	28.00	78.00	17.50	70.50	0.00	0.00	63.00	1.75
4	MULTIVAR 80	1314.85	37.00	91.00	71.75	111.25	0.00	0.00	48.25	1.75
12	S.J.1	1281.92	40.00	94.00	81.25	148.75	0.00	0.00	108.50	1.50
3	LINCOLN	1156.90	40.00	94.00	110.75	127.75	0.00	0.00	48.50	2.00
2	SWIFT	1151.06	28.00	78.00	29.00	37.50	0.00	0.00	47.75	1.25
14	CALLAND	988.53	35.00	85.00	21.25	40.50	0.00	0.00	46.50	1.25
7	BEESON	965.61	35.00	85.00	19.25	34.75	0.00	0.00	43.00	1.25
9	FORREST	913.93	35.00	85.00	15.50	53.25	0.00	0.00	40.00	1.50
15	BONUS	816.91	35.00	85.00	22.25	36.50	0.00	0.00	42.75	1.00
5	AMSOY 71	817.25	35.00	85.00	26.50	41.25	0.00	0.00	41.75	1.00
13	WILLIAMS	678.47	35.00	85.00	33.75	72.50	0.00	0.00	40.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
CORRELATIONS										
(* - PROB=.05 ** - PROB=.01)										
YIPID	KG/HA	1.00	0.47**	0.66**	0.50**	0.55**	0.00	0.00	0.65**	0.60**
DAYS TO FLOWER	1.00	0.47**	1.00	0.95**	0.54**	0.56**	0.00	0.00	0.52**	0.51**
DAYS TO MATURITY	0.66**	0.95**	1.00	0.63**	0.66**	0.64**	0.00	0.00	0.64**	0.57**
NODULE NUMBER 1	0.50**	0.54**	0.63**	1.00	0.67**	0.67**	0.00	0.00	0.38**	0.38**
NODULE NUMBER 2	0.55**	0.56**	0.66**	0.67**	1.00	1.00	0.00	0.00	0.49**	0.51**
NODULE HEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE HEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	0.65**	0.52**	0.64**	0.38**	0.49**	0.00	0.00	1.00	0.41**
LODGING	0.60**	0.51**	0.57**	0.38**	0.51**	0.41**	0.00	0.00	1.00	0.41**
SHATTER	0.11	0.03	0.04	0.33**	0.19	0.20	0.00	0.00	-0.00	0.32**
PLANTS HARVEST	0.32**	-0.14	-0.04	0.12	0.05	0.07	0.00	0.00	0.20	0.07
PODS PER PLANT	0.73**	0.67**	0.81**	0.50**	0.55**	0.55**	0.00	0.00	0.70**	0.60**
100 SEED WEIGHT	0.05	-0.10	-0.08	0.00	-0.03	-0.03	0.00	0.00	-0.04	0.05
QUALITY OF SEED	-0.00	-0.02	0.01	-0.17	-0.19	-0.20	0.00	0.00	-0.20	0.06
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 125

EXPERIMENT 601

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	KACHSIUNG E-32	1.00	186.75	44.25	15.00	4.00
17	ORBA	1.00	181.25	50.50	14.50	3.50
11	CLARK 63	1.00	148.50	35.25	15.25	2.00
16	TK-5	1.00	199.25	31.50	15.75	1.00
8	TAINUNG 4	1.75	215.50	25.00	17.00	2.25
10	CPS-16-17	1.00	190.50	25.25	17.00	1.50
1	ALTONA	1.00	188.75	20.25	17.75	2.50
4	MULTIVAR 80	1.00	163.00	26.75	18.50	2.50
12	S.J.1	1.00	177.50	31.75	14.75	1.00
3	LINCOLN	1.00	106.00	26.75	18.50	2.50
2	SWIFT	1.00	187.75	18.75	15.50	4.00
14	CALLAND	1.00	163.00	16.50	16.50	4.50
7	BEESON	1.00	196.00	13.50	16.50	3.00
9	FORREST	1.00	191.25	20.00	11.50	2.50
15	BONUS	1.00	193.25	15.75	15.75	3.00
5	AMSOY 71	1.00	143.25	17.25	15.00	3.00
13	WILLIAMS	1.00	123.25	18.50	15.50	3.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.04	173.81	25.74	15.90	2.69
COEFFICIENT OF VARIATION		0.06	16.08	2.79	0.87	0.30
5% LSD VARIETY MEANS (*****=NS)		11.61%	18.50%	21.65%	10.95%	22.27%
		0.17	45.96	7.96	2.49	0.86
C O R R E L A T I O N S						
		{+ - PROB=-.05    ++ - PROB=-.01}				
YIELD	KG/HA	0.11	0.32++	0.73++	0.05	-0.00
DAYS TO FLOWER		0.03	-0.14	0.67++	-0.10	0.00
DAYS TO MATURITY		0.04	-0.04	0.81++	-0.08	0.00
NODULE NUMBER 1		0.33++	0.12	0.50++	0.00	0.00
NODULE NUMBER 2		0.19	0.05	0.55++	-0.03	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.00	0.20	0.70++	-0.04	0.00
LODGING		0.32++	0.07	0.60++	0.05	0.00
SHATTER		1.00	0.26+	0.04	0.04	0.00
PLANTS	HARVEST	0.26+	1.00	-0.07	0.03	0.00
PODS PER	PLANT	0.04	-0.07	1.00	-0.13	0.00
100 SEED	WEIGHT	0.04	0.03	-0.05	1.00	0.00
QUALITY	OF SEED	-0.07	-0.07	-0.05	-0.01	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00
						1.00

TABLE 126 EXPERIMENT 429 YEAR 1975

REGION - ASIA COUNTRY - PHILIPPINES  
 SITE - LOS RANOS ELEVATION - 15 M  
 LATITUDE - 14 DEG. 10 MIN. N LONGITUDE - 121 DEG. 15 MIN. E  
 COOPERATORS - B.M. LEGASPI, R.R. MATIAS  
 DATE PLANTED - JUNE 26, 1975 DATE HARVESTED - OCTOBER, 1975  
 SOIL TYPE - CLAY, PH 5.9  
 FERTILIZER USED (KG/HA) - N 56.0, P 56.0, K 56.0  
 AMOUNT OF MOISTURE - 2290 MM  
 LOCAL VARIETIES - L-114, TK-5

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
12	WOODWORTH	3098.16	27.00	90.00	129.25	226.00	0.12	1.16	70.75	1.00
13	WILLIAMS	3095.24	27.00	91.50	163.75	329.00	0.15	1.71	80.25	1.00
5	COBB	3046.03	33.00	102.00	139.50	341.00	0.46	1.49	64.00	1.00
11	CLARK 63	2837.11	27.00	93.00	132.25	212.25	0.09	1.48	72.25	1.25
8	TRACY	2673.83	27.00	96.00	193.00	409.00	0.20	2.67	49.25	1.00
10	COLUMBUS	2650.32	27.00	94.50	123.50	329.50	0.09	1.69	65.25	1.00
9	FORREST	2347.18	33.00	93.00	169.00	347.25	0.52	1.96	53.00	1.25
7	DAVIS	2342.72	33.00	96.00	165.75	314.75	0.57	1.81	50.00	1.00
3	HARDEE	2229.74	40.00	102.00	314.00	652.00	0.80	3.82	60.50	1.00
6	BOSSIER	2196.23	28.50	97.50	121.25	319.50	0.19	1.26	37.75	1.00
4	IMPROVED PELICAN	2175.23	40.00	105.00	304.75	434.75	0.81	2.42	118.75	2.00
14	L-114	2105.96	54.00	114.75	458.75	738.75	2.46	8.23	84.25	2.00
2	HAMPTON 266A	1937.30	33.00	96.00	221.00	416.75	1.57	1.57	53.00	1.00
15	TK-5	1702.42	40.00	90.00	304.25	483.75	1.64	4.41	64.00	2.00
1	JUPITER	1231.50	54.00	113.50	176.50	327.50	0.94	1.96	87.00	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2377.93	34.90	98.32	207.77	392.12	0.64	2.51	67.33	1.30
COEFFICIENT OF VARIATION		127.67	0.39	0.94	34.64	83.76	0.14	0.55	3.34	0.09
5% LSD VARIETY MEANS (*****NS)		10.74%	2.22%	1.91%	33.35%	42.72%	43.86%	43.83%	9.92%	14.21%
		364.91	1.11	2.68	99.02	239.41	0.40	1.57	9.54	0.26
C O R R E L A T I O N S (+ - PROB=-.05 +- - PROB=-.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.68++								
DAYS TO MATURITY		1.00								
NODULE NUMBER 1		0.82++								
NODULE NUMBER 2		0.82++								
NODULE WEIGHT 1		0.26+								
NODULE WEIGHT 2		0.42++								
PLANT HEIGHT		0.79++								
LODGING		-0.24								
PLANTS HARVEST		-0.06								
PODS PER PLANT		0.54++								
100 SEED WEIGHT		-0.52++								
QUALITY OF SEED		0.53++								
DISEASE I		0.25+								
DISEASE II		-0.25								
DISEASE III		0.00								

TABLE 126 EXPERIMENT 429 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
12	WOODWORTH	1.00	146.75	35.63	18.93	2.50
13	WILLIAMS	1.00	138.50	35.18	17.53	2.00
5	COBB	1.00	130.50	38.43	17.13	1.75
11	CLARK 63	1.00	124.00	38.88	17.95	1.50
8	TRACY	1.00	133.50	33.40	19.08	1.75
10	COLUMBUS	1.00	120.25	34.73	17.38	1.00
9	FORREST	1.00	138.50	44.30	13.85	1.25
7	DAVIS	1.00	142.00	41.88	14.00	1.00
3	HARDEE	1.00	130.00	83.55	15.50	1.25
6	BOSSIER	1.00	136.75	61.58	16.35	2.00
4	IMPROVED PELICAN	1.00	128.50	107.58	10.48	1.00
14	L-114	1.00	89.75	103.33	14.30	1.00
2	HAMPTON 266A	1.00	133.50	45.78	15.88	1.50
15	TK-5	1.00	98.50	59.90	14.08	1.25
1	JUPITER	1.00	101.25	74.60	13.80	2.00
GRAND MEAN						
		1.00	126.15	55.91	15.75	1.52
STANDARD ERROR OF A VARIETY MEAN						
		0.00	7.12	3.76	0.83	0.19
COEFFICIENT OF VARIATION						
		0.00%	11.29%	13.45%	10.50%	25.26%
5% LSD VARIETY MEANS (*****=NS)						
		0.00	20.35	10.75	2.36	0.55
C O R R E L A T I O N S						
				(+ - PROB=.05	++ - PROB=.01)	
YIELD	KG/HA	0.00	0.54++	-0.52++	0.53++	0.25+
DAYS TO FLOWER		0.00	-0.60++	0.76++	-0.56++	-0.23
DAYS TO MATURITY		0.00	-0.45++	0.72++	-0.41++	-0.17
NODULE NUMBER 1		0.00	-0.44++	0.64++	-0.32+	-0.35++
NODULE NUMBER 2		0.00	-0.40++	0.48++	-0.12	-0.17
NODULE WEIGHT 1		0.00	-0.59++	0.62++	-0.44++	-0.34++
NODULE WEIGHT 2		0.00	-0.49++	0.54++	-0.19	-0.26+
PLANT	HEIGHT	0.00	-0.25+	0.53++	-0.38++	-0.13
	LODGING	0.00	-0.53++	0.65++	-0.58++	-0.28+
	SHATTER	1.00	0.00	0.00	0.00	0.00
	HARVEST	0.00	1.00	-0.45++	0.24	0.24
PLANTS PER	PLANT	0.00	-0.45++	1.00	-0.62++	-0.33++
100 SEED	WEIGHT	0.00	0.24	-0.62++	1.00	0.44++
QUALITY	OF SEED	0.00	0.24	-0.33++	0.44++	1.00
DISEASE	I	0.00	-0.24	0.23	-0.39++	-0.42++
DISEASE	II	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	1.00



TABLE 127 EXPERIMENT 380 YEAR 1975

REGION - ASIA  
 SITE - ALUTHARAMA  
 LATITUDE - 7 DEG. N  
 COOPERATOR - S.M. SANTHRASIVAM  
 DATE PLANTED - MAY 19, 1975  
 SOIL TYPE - SANDY LOAM, PH 6.6  
 FERTILIZER USED (KG/HA) - N 20.0, P 26.2, K 33.3  
 AMOUNT OF MOISTURE - 337 MM  
 NUMBER OF IRRIGATIONS - 10  
 LOCAL VARIETIES - PB-1, S.J.2  
 SUBSTITUTE VARIETIES - BRAGG, HILL, BONUS

COUNTRY - SRI LANKA  
 ELEVATION - 266 M  
 LONGITUDE - 80 DEG. E  
 DATE HARVESTED - AUGUST, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	PLANT HEIGHT	LODGING
2	HAMPTON 266A	2100.47	31.50	97.25	123.50	184.75	0.23	0.77	22.78	0.00	0.00
15	S.J.2	2071.86	37.75	98.50	73.50	125.25	0.08	0.38	54.43	0.00	0.00
3	HARDEE	2048.30	35.25	97.50	195.50	216.50	0.26	0.89	27.78	0.00	0.00
6	BRAGG	2004.11	30.75	92.25	54.75	132.50	0.06	0.61	25.35	0.00	0.00
7	DAVIS	1876.45	32.25	96.00	93.75	181.50	0.16	0.84	20.78	0.00	0.00
9	PORRETT	1766.44	30.50	92.50	72.25	139.50	0.06	0.62	25.60	0.00	0.00
13	WILLIAMS	1707.39	25.00	92.25	86.00	125.00	0.06	0.71	34.90	0.00	0.00
4	IMPROVED PELICAN	1650.53	37.25	100.50	101.25	108.25	0.08	0.53	76.02	0.00	0.00
5	BOSSIER	1597.78	38.25	102.75	105.25	143.75	0.11	0.52	31.00	0.00	0.00
14	PB-1	1479.46	36.75	93.00	130.00	167.50	0.15	0.72	35.35	0.00	0.00
12	BONUS	1458.62	26.00	93.75	156.75	127.00	0.08	0.74	30.93	0.00	0.00
8	TRACY	1427.57	27.25	87.00	99.25	169.25	0.14	0.66	21.75	0.00	0.00
11	CLARK 63	1421.34	32.25	88.75	89.25	133.25	0.13	0.74	36.28	0.00	0.00
10	HILL	1416.50	33.00	87.25	93.50	168.25	0.08	0.74	23.25	0.00	0.00
1	JUPITER	979.36	49.00	112.50	73.00	108.75	0.09	0.44	51.68	0.00	0.00
GRAND MEAN		1666.41	33.52	95.45	103.17	148.73	0.12	0.66	34.52	0.00	0.00
STANDARD ERROR OF A VARIETY MEAN		124.47	0.51	1.09	21.97	27.05	0.06	0.12	2.01	0.00	0.00
COEFFICIENT OF VARIATION		14.94%	3.02%	2.28%	42.60%	36.37%	100.34%	34.82%	11.63%	0.00%	0.00%
5% LSD VARIETY MEANS (*****=NS)		355.24	1.45	3.11	62.71	*****	*****	*****	5.73	0.00	0.00
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)											
YIELD	KG/HA	1.00	-0.24	-0.07	0.17	0.11	0.13	0.20	-0.06	0.00	0.00
DAYS TO FLOWER		-0.24	1.00	0.77++	-0.10	-0.12	0.01	-0.25	0.50++	0.00	0.00
DAYS TO MATURITY		-0.07	0.77++	1.00	0.03	-0.21	-0.03	-0.27+	0.49++	0.00	0.00
NODULE NUMBER 1		0.17	-0.10	0.03	1.00	0.39++	0.44++	0.50++	-0.01	0.00	0.00
NODULE NUMBER 2		0.11	-0.12	-0.21	0.39++	1.00	0.38++	0.71++	-0.32+	0.00	0.00
NODULE WEIGHT 1		0.13	0.01	-0.03	0.44++	0.38++	1.00	0.29+	-0.10	0.00	0.00
NODULE WEIGHT 2		0.20	-0.25	-0.27+	0.50++	0.71++	0.29+	1.00	-0.24	0.00	0.00
NODULE PLANT		-0.06	0.50++	0.49++	-0.01	-0.32+	-0.10	-0.24	1.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
SHATTER		-0.34++	0.38++	0.43++	-0.00	-0.33+	-0.16	-0.24	0.52++	0.00	0.00
HARVEST		0.40++	-0.22	-0.08	0.30+	0.13	0.10	0.06	0.06	0.00	0.00
PODS PER PLANT		0.12	0.44++	0.29+	0.25	0.03	0.20	-0.01	0.43++	0.00	0.00
100 SEED WEIGHT		-0.09	-0.43++	-0.11	-0.07	-0.23	-0.04	0.03	-0.26+	0.00	0.00
QUALITY OF SEED		-0.20	0.32+	0.36++	-0.03	-0.06	-0.22	-0.04	0.05	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 127

EXPERIMENT 380

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
2	HAMPTON 266A	1.25	199.25	22.00	16.95	2.25	42.7	23.6
15	S.J-2	1.75	200.00	28.25	12.38	1.75	44.8	21.4
3	HARDEE	1.00	199.25	28.50	13.30	2.00	46.3	21.3
6	BRAGG	1.25	197.00	24.50	15.33	2.00	44.3	23.8
7	DAVIS	1.25	198.75	19.75	15.13	2.00	46.1	20.7
9	FORREST	1.00	198.75	25.50	13.58	2.00	44.9	21.8
13	WILLIAMS	1.00	200.00	18.25	19.55	2.00	44.7	22.6
4	IMPROVED PELICAN	2.75	198.50	32.50	12.38	2.00	44.5	22.1
5	BOSSIER	2.50	199.25	29.25	14.58	2.00	44.7	21.8
14	PB-1	1.00	197.50	36.75	11.80	2.00	46.1	19.6
12	BONUS	2.25	198.00	20.00	17.93	2.00	43.1	24.5
8	TRACY	1.00	197.00	18.25	17.73	2.00	44.5	23.1
11	CLARK 63	3.25	198.50	19.00	17.23	2.00	45.7	22.4
10	HILL	1.00	198.50	21.25	14.08	2.00	42.2	22.0
1	JUPITER	2.75	195.50	27.25	16.63	2.75	45.5	21.4
GRAND MFAN								
STANDARD ERROR OF A VARIETY MEAN		1.67	198.38	24.73	15.23	2.05		
COEFFICIENT OF VARIATION		0.25	1.07	2.78	0.61	0.19		
5% LSD VARIETY MEANS (*****=NS)		30.14%	1.08%	22.51%	7.98%	18.74%		
		0.72	*****	7.94	1.73	*****		
C O R R E L A T I O N S								
					(+ - PROB=.05		+ - PROB=-.01)	
YIELD	KG/HA	-0.34++	0.40++	0.12	-0.09	-0.20	0.00	0.00
DAYS TO	FLOWER	0.38++	-0.22	0.44++	-0.43++	0.32+	0.00	0.00
DAYS TO	MATURITY	0.43++	-0.08	0.29+	-0.11	0.36++	0.00	0.00
NODULE	NUMBER 1	-0.00	0.30+	0.25	-0.07	-0.03	0.00	0.00
NODULE	NUMBER 2	-0.33+	0.13	0.03	-0.23	-0.06	0.00	0.00
NODULE	WEIGHT 1	-0.16	0.10	0.20	-0.04	-0.22	0.00	0.00
NODULE	WEIGHT 2	-0.24	0.06	-0.01	0.03	-0.04	0.00	0.00
PLANT	HEIGHT	0.52++	0.06	0.43++	-0.26+	0.05	0.00	0.00
	LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SHATTER	1.00	-0.06	-0.04	0.05	0.15	0.00	0.00
PLANTS	HARVEST	-0.06	1.00	0.02	-0.07	-0.12	0.00	0.00
PODS PER	PLANT	-0.04	0.02	1.00	-0.49++	-0.04	0.00	0.00
100 SEED	WEIGHT	0.05	-0.07	-0.49++	1.00	0.14	0.00	0.00
QUALITY	OF SEED	0.15	-0.12	-0.04	0.14	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 128

EXPERIMENT 660

YEAR 1975

REGION - ASIA  
 SITE - ALUTHARAMA  
 LATITUDE - 7 DEG. N  
 COOPERATOR - S.M. SANTHIRASIVAM  
 DATE PLANTED - NOVEMBER 11, 1975  
 SOIL TYPE - SANDY LOAM, PH 5.5  
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2  
 AMOUNT OF MOISTURE - 1477 MM  
 NUMBER OF IRRIGATIONS - 3  
 SUBSTITUTE VARIETIES - BRAGG, HILL, BONUS  
 LOCAL VARIETIES - PE-1, S.J.2

COUNTRY - SRI LANKA  
 ELEVATION - 266 M  
 LONGITUDE - 80 DEG. E  
 DATE HARVESTED - FEBRUARY, 1976

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE W/FIGHT 1	NODULE W/FIGHT 2	PLANT HEIGHT	ICGING
5	BOSSIER	2575.10	34.00	93.50	193.25	352.00	0.35	1.50	0.35	1.50	46.75	1.00
1	JUPIITER	2500.50	37.00	100.00	149.00	257.00	0.32	0.84	0.32	0.84	58.25	1.50
7	DAVIS	2496.75	30.00	97.00	167.00	230.75	0.40	1.58	0.40	1.58	26.25	1.00
2	HARDLE	2340.88	32.00	95.00	125.50	233.50	0.43	1.51	0.43	1.51	28.50	1.00
4	IMPROVILE PELICAN	2235.45	32.25	90.75	132.25	289.50	0.31	1.20	0.31	1.20	57.25	1.50
13	WILLIAMS	2095.84	28.75	88.50	188.50	152.75	0.49	1.25	0.49	1.25	36.00	1.00
9	FORREST	1990.81	29.25	90.00	166.25	227.00	0.42	1.11	0.42	1.11	28.25	1.00
15	S.J.2	1945.39	32.00	91.50	144.25	192.25	0.41	0.65	0.41	0.65	51.75	1.00
6	BRAGG	1942.05	28.75	89.75	142.75	202.50	0.32	1.20	0.32	1.20	28.00	1.00
2	HAMPTON 266A	1937.89	29.50	91.25	107.00	194.25	0.13	0.89	0.13	0.89	26.25	1.00
14	PE-1	1827.87	31.00	86.25	156.00	298.75	0.52	1.23	0.52	1.23	39.25	1.00
10	HILL	1631.99	30.00	82.25	142.50	188.00	0.35	0.84	0.35	0.84	30.25	1.00
12	BONUS	1625.32	26.00	87.00	137.50	201.75	0.37	1.16	0.37	1.16	31.75	1.00
11	CIARK 63	1600.32	30.00	85.25	198.75	246.25	0.48	1.43	0.48	1.43	43.25	1.00
8	TRACY	1521.14	28.00	86.00	156.75	195.00	0.37	0.88	0.37	0.88	23.25	1.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN		2017.82	30.57	90.27	153.82	233.42	0.38	1.15	0.38	1.15	37.00	1.07
COEFFICIENT OF VARIATION		127.27	0.15	0.61	16.20	21.37	0.36	0.17	0.36	0.17	1.47	0.11
5% ISI VARIETY MEANS (*****=NS)		12.61%	0.97%	1.35%	21.07%	18.31%	32.37%	28.88%	32.37%	28.88%	7.96%	19.76%
		363.23	0.42	1.74	46.24	60.99	0.18	0.47	0.18	0.47	4.20	0.30
CORRELATION COEFFICIENTS (+ - PROB=.05 ** - PRCB=.01)												
YIELD	KG/HA	1.00	0.57**	0.77**	0.17	0.41**	-0.09	0.29+	0.36**	0.30+	0.36**	0.30+
DAYS TO FLOWER	0.57**	1.00	0.63**	0.63**	0.04	0.43**	-0.06	-0.03	0.71**	0.41**	0.71**	0.41**
DAYS TO MATURITY	0.77**	0.63**	1.00	0.90	-0.02	0.25	-0.15	0.16	0.31*	0.31*	0.31*	0.30+
NODULE NUMBER 1	0.17	0.04	-0.02	0.02	1.00	0.31*	0.52**	0.06	0.33+	0.21	0.31*	0.30+
NODULE NUMBER 2	0.41**	0.43**	0.25	0.31*	0.31*	1.00	0.24	0.45**	0.45**	0.45**	0.45**	0.23
NODULE WEIGHT 1	-0.09	-0.06	-0.15	-0.15	0.52**	0.24	1.00	0.24	0.09	0.24	0.09	-0.13
NODULE WEIGHT 2	0.29+	-0.03	0.16	0.33+	0.33+	0.45**	0.24	1.00	-0.06	1.00	-0.06	-0.15
PLANT HEIGHT	0.36**	0.71**	0.31*	0.31*	0.21	0.45**	0.09	0.06	0.51**	0.06	0.51**	0.51**
ICGING	0.30+	0.41**	0.30+	0.30+	0.06	0.23	-0.13	-0.15	1.00	-0.15	1.00	1.00
SHAFTER	-0.28+	0.00	-0.28+	-0.28+	0.14	-0.01	0.15	0.15	0.10	0.15	0.10	-0.14
HARVEST	0.09	0.16	0.03	0.03	-0.06	0.05	0.03	-0.02	-0.08	-0.02	-0.08	0.05
POSS PER PLANT	0.28+	0.46**	0.22	0.22	0.08	0.32+	0.01	-0.04	0.45**	0.01	0.45**	0.23
100 SEED W/FIGHT	0.48**	0.16	0.65**	0.65**	0.07	-0.06	-0.25	0.20	-0.06	0.20	-0.06	0.11
QUALITY OF SEED	-0.06	-0.35**	-0.15	-0.15	0.02	-0.01	-0.18	0.09	-0.32+	0.09	-0.32+	-0.18

TABLE 128

EXPERIMENT 663

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	BCSSIER	1.50	299.50	16.75	18.13	1.75
1	JUPITER	1.25	300.00	16.75	19.90	1.00
7	DAVIS	1.50	299.75	14.75	19.93	1.50
3	HARDEE	2.00	299.50	17.50	17.88	1.00
4	IMPROVED PELICAN	1.75	299.00	19.00	14.90	1.00
13	WILLIAMS	1.00	299.50	12.75	18.60	1.00
5	FORREST	1.25	299.50	14.75	14.98	1.00
15	S.J.2	1.75	299.25	19.00	15.00	1.00
6	BRAGG	1.50	299.75	14.50	17.70	1.25
2	HAMPTON 266A	1.25	300.00	17.75	18.15	1.75
14	PB-1	1.50	300.00	19.50	11.70	1.00
10	HILL	2.00	300.00	13.50	13.83	1.75
12	BONUS	1.25	298.25	13.75	16.38	2.00
11	CLARK 63	4.25	299.75	18.50	15.45	1.00
8	TRACY	1.75	300.00	14.00	17.38	1.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.70	299.58	15.98	16.66	1.32
COEFFICIENT OF VARIATION		0.24	0.44	1.10	0.56	0.17
5% ISI VARIETY MEANS (*****=NS)		27.83%	0.29%	13.74%	6.76%	25.41%
		0.68	*****	3.13	1.61	0.48
C O R R E L A T I O N S						
			(+ - PROB=.05	+ - - PROB=.01)		
YIELD	KG/HA	-0.28+	0.09	0.28+	0.48++	-0.06
DAYS TO FLOWER		0.00	0.16	0.46++	0.16	-0.35++
DAYS TO MATURITY		-0.28+	0.03	0.22	0.65++	-0.15
NODULE NUMBER 1		0.14	-0.06	0.08	0.07	0.02
NODULE NUMBER 2		-0.01	0.05	0.32+	-0.06	-0.01
NODULE WEIGHT 1		0.15	0.03	0.01	-0.25	-0.18
NODULE WEIGHT 2		0.15	-0.02	-0.04	0.20	0.09
PLANT HEIGHT		0.10	-0.08	0.45++	-0.06	-0.32+
LOADING		-0.14	0.05	0.23	0.11	-0.18
SHATTER		1.00	0.12	0.26+	-0.22	-0.14
PLANTS HARVEST		0.12	1.00	0.09	0.03	-0.08
PODS PER PLANT		0.26+	0.09	1.00	-0.17	-0.31+
100 SEED WEIGHT		-0.22	0.03	-0.17	1.00	0.13
QUALITY OF SEED		-0.14	-0.08	-0.31+	0.13	1.00

TABLE 129 EXPERIMENT 374 YEAR 1975

REGION - ASIA  
 SITE - ANGUNKOLAPALESSA  
 LATITUDE - 6 DEG. 20 MIN. N  
 COOPERATOR - A. SENTHINATHAN  
 DATE PLANTED - JUNE 7, 1975  
 SOIL PH 6.0  
 FERTILIZER USED (KG/HA) - N 20.0, P 26.2, K 33.3  
 AMOUNT OF MOISTURE - 642 MM  
 NUMBER OF IRRIGATIONS - 8  
 LOCAL VARIETIES - PB-1, S.J.2  
 SUBSTITUTE VARIETIES - BRAGG, HILL, BONUS

COUNTRY - SRI LANKA  
 ELEVATION - 10 M  
 LONGITUDE - 81 DEG. E  
 DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEF	3039.77	35.50	94.25	211.00	235.25	0.90	1.26	0.90	35.88	1.00
6	BOSSIER	2677.20	32.25	97.00	158.00	227.25	0.40	0.88	0.40	37.93	1.00
4	IMPROVED PELICAN	2661.78	34.75	94.25	123.75	157.25	0.57	1.17	0.57	59.83	2.50
14	PB-1	2430.90	35.50	83.00	135.00	128.25	0.47	1.03	0.47	44.48	2.00
7	DAVIS	2417.15	28.75	93.75	124.75	148.50	0.37	0.99	0.37	32.93	1.00
9	FORREST	2297.54	30.00	85.00	97.50	113.50	0.24	0.55	0.24	29.55	1.00
15	S-J-2	2242.53	32.00	93.75	109.00	109.00	0.43	0.71	0.43	47.20	3.00
5	BRAGG	2206.27	28.50	91.75	106.50	156.75	0.18	0.65	0.18	31.15	1.00
1	JUPIER	2077.50	35.50	107.25	151.50	123.50	0.53	1.00	0.53	61.15	3.00
10	HILL	2015.82	31.25	79.50	116.00	131.00	0.30	0.59	0.30	34.53	1.25
8	TRACY	2004.15	28.50	85.75	133.25	164.25	0.37	0.79	0.37	28.85	1.25
2	HAMPTON 266A	1879.96	30.75	93.25	94.75	135.75	0.13	0.46	0.13	30.20	1.00
13	WILLIAMS	1811.61	27.75	81.50	88.50	112.75	0.12	0.56	0.12	38.20	1.00
11	CLARK 63	1782.86	27.50	77.00	116.25	132.00	0.43	0.74	0.43	44.20	2.00
12	BONUS	1538.22	27.00	81.50	106.50	120.75	0.18	0.53	0.18	33.15	1.00
GRAND MPAN											
STANDARD ERROR OF A VARIETY MEAN		2205.55	31.03	89.23	124.82	146.38	0.37	0.77	0.37	39.28	1.53
COEFFICIENT OF VARIATION		217.54	0.64	1.04	16.35	26.54	0.07	0.18	0.07	2.05	0.12
5% LSD VARIETY MEANS (*****=NS)		19.73%	4.14%	2.32%	26.20%	36.26%	39.29%	45.85%	39.29%	10.42%	15.48%
		620.88	1.83	2.96	46.66	75.75	0.21	*****	0.21	5.84	0.34
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)											
YIELD	KG/HA	1.00	0.48++	0.39++	0.59++	0.45++	0.64++	0.49++	0.15	0.01	0.01
DAYS TO FLOWER		0.48++	1.00	0.52++	0.46++	0.18	0.61++	0.31+	0.55++	0.46++	0.46++
DAYS TO MATURITY		0.39++	0.52++	1.00	0.34++	0.26+	0.34++	0.19	0.38++	0.33++	0.33++
NODULE NUMBER 1		0.59++	0.46++	0.34++	1.00	0.55++	0.80++	0.46++	0.16	0.02	0.02
NODULE NUMBER 2		0.45++	0.18	0.26+	0.55++	1.00	0.47++	0.73++	-0.15	-0.25	-0.25
NODULE WEIGHT 1		0.64++	0.61++	0.34++	0.80++	0.47++	1.00	0.56++	0.36++	0.26+	0.26+
NODULE WEIGHT 2		0.49++	0.31+	0.19	0.46++	0.73++	0.56++	1.00	0.15	0.03	0.03
PLANT HEIGHT		0.15	0.55++	0.38++	0.16	-0.15	0.36++	0.15	1.00	0.82++	0.82++
LODGING		0.01	0.46++	0.33++	0.02	-0.25	0.26+	0.03	0.82++	1.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		-0.07	-0.10	-0.40++	0.09	-0.28+	0.04	-0.09	0.04	0.02	0.02
PLANTS PER 100 SEED		0.33++	0.44++	-0.01	0.16	-0.02	0.35++	0.20	0.39++	0.31+	0.31+
QUALITY OF SEED		-0.30+	-0.51++	-0.06	0.01	0.18	-0.27+	-0.11	-0.38++	-0.44++	-0.44++
DISEASE I		-0.39++	-0.32+	-0.21	-0.14	-0.09	-0.15	-0.14	-0.18	-0.13	-0.13
DISEASE II		-0.24	-0.43++	-0.35++	-0.22	-0.10	-0.28+	-0.20	-0.43++	-0.39++	-0.39++
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE IV		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 129 EXPERIMENT 374 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDFE	1.00	174.25	31.95	18.25	1.25	44.1	23.0
6	BOSSIER	1.00	142.00	24.50	17.00	1.25	45.5	23.3
4	IMPROVED PELICAN	1.00	163.25	31.83	14.00	1.00	45.9	21.4
14	PB-1	1.00	202.75	39.88	13.50	1.00	45.0	19.5
7	DAVIS	1.00	191.75	25.98	18.75	2.25	44.1	22.8
9	PORREST	1.00	182.75	26.38	15.50	1.75	44.3	21.9
15	S-J.2	1.00	160.25	28.58	13.50	1.25	43.4	25.0
5	BRAGG	1.00	190.50	20.08	20.00	1.00	44.1	24.9
10	JUPIER	1.00	181.75	28.95	19.75	1.75	46.8	22.5
8	HILL	1.00	183.75	24.73	18.25	1.75	43.5	22.8
2	TRACY	1.00	197.00	22.83	22.00	2.00	45.8	21.8
13	HAMPTON 266A	1.00	141.00	29.95	20.50	1.25	42.2	24.5
11	WILLIAMS	1.00	177.25	25.93	21.00	1.50	44.0	24.6
11	CLARK 63	1.00	199.00	30.50	17.75	2.00	45.4	21.4
12	BONUS	1.00	191.00	24.80	22.25	2.50	45.3	23.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
(+ - PROB=.05      +- - PROB=.01) C O R R E L A T I O N S								
YIELD	KG/HA	0.00	-0.07	0.33++	-0.30+	-0.39++	-0.24	0.00
DAYS TO FLOWER		0.00	-0.10	0.44++	-0.51++	-0.32+	-0.43++	0.00
DAYS TO MATURITY		0.00	-0.40++	-0.01	-0.06	-0.21	-0.35++	0.00
NODULE NUMBER 1		0.00	0.09	0.16	0.01	-0.14	-0.22	0.00
NODULE NUMBER 2		0.00	-0.28+	-0.02	0.18	-0.09	-0.10	0.00
NODULE WEIGHT 1		0.00	0.04	0.35++	-0.27+	-0.15	-0.28+	0.00
NODULE WEIGHT 2		0.00	-0.09	0.20	-0.11	-0.14	-0.20	0.00
NODULE HEIGHT		0.00	0.04	0.39++	-0.38++	-0.18	-0.43++	0.00
PLANT LONGING		0.00	0.02	0.31+	-0.44++	-0.13	-0.39++	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.06	0.14	0.11	0.18	0.00
PODS PER PLANT		0.00	0.06	1.00	-0.38++	-0.20	-0.25	0.00
100 SPD WEIGHT		0.00	0.14	-0.38++	1.00	0.15	0.26+	0.00
QUALITY OF SPED		0.00	0.11	-0.20	0.15	1.00	0.38++	0.00
DISEASE I		0.00	0.18	-0.25	0.26+	0.38++	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00								





TABLE 130 EXPERIMENT 375 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEE	1.00	200.50	35.25	21.19	1.50	43.2	23.9
1	JUPITER	1.00	200.50	46.25	22.23	1.00	40.7	27.0
4	IMPROVED PELICAN	1.00	200.25	31.00	15.67	1.00	43.1	23.6
7	DAVIS	1.00	201.00	28.00	21.49	2.50	40.8	24.7
13	WILLIAMS	1.00	200.50	16.50	24.50	1.00	43.9	23.2
15	S.J.2	1.00	200.75	45.75	14.76	1.00	40.4	22.9
14	PB-1	1.00	200.00	44.75	12.94	1.00	43.8	20.8
6	BOSSIER	1.00	200.75	25.00	18.88	1.00	40.3	25.4
10	HILL	1.00	200.25	22.25	17.62	1.00	38.0	25.1
12	BONUS	1.00	199.75	18.00	22.40	1.00	43.7	23.1
2	HAMPTON 266A	1.00	200.00	23.00	21.79	1.00	38.7	26.4
9	FORREST	1.00	199.75	25.00	17.71	1.00	40.5	24.5
11	CLARK 63	1.00	200.00	16.00	20.35	1.00	41.8	24.2
5	BRAGG	1.00	199.25	16.75	22.12	1.00	39.7	25.3
8	TRACY	1.00	200.00	15.25	20.79	1.00	39.7	24.0
GRAND MEAN								
		1.00	200.22	26.98	19.63	1.13		
STANDARD ERROR OF A VARIETY MEAN								
		0.00	0.41	2.70	0.72	0.23		
COEFFICIENT OF VARIATION								
		0.00%	0.41%	20.01%	7.33%	40.69%		
5% LSD VARIETY MEANS (*****=NS)								
		0.00	*****	7.71	2.05	0.66		
C O R R E L A T I O N S								
					(+ - PROB=.05		+ - PROB=.01)	
YIELD	KG/HA	0.00	0.42++	0.62++	0.05	0.33++	-0.22	0.00
DAYS TO	FLOWER	0.00	0.28+	0.72++	-0.45++	0.12	-0.50++	0.00
DAYS TO	MATURITY	0.00	0.23	0.67++	-0.07	0.17	-0.38++	0.00
NODULE	NUMBER 1	0.00	0.15	0.19	-0.41++	-0.04	-0.11	0.00
NODULE	NUMBER 2	0.00	0.12	0.18	-0.27+	0.11	-0.02	0.00
NODULE	WEIGHT 1	0.00	0.26+	0.39++	-0.28+	0.12	-0.09	0.00
NODULE	WEIGHT 2	0.00	0.09	-0.21	0.31+	0.18	0.46++	0.00
PLANT	HEIGHT	0.00	0.23	0.72++	-0.44++	-0.11	-0.47++	0.00
LODGING		0.00	0.06	0.49++	-0.08	-0.07	-0.28+	0.00
SHATER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.19	0.01	0.32+	0.02	0.00
PODS PER	PLANT	0.00	0.19	1.00	-0.48++	0.08	-0.44++	0.00
100 SEED	WEIGHT	0.00	0.01	-0.48++	1.00	0.09	0.50++	0.00
QUALITY	OF SEED	0.00	0.32+	0.08	0.09	1.00	0.34++	0.00
DISEASE	I	0.00	0.02	-0.44++	0.50++	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 131 EXPERIMENT 378 YEAR 1975

REGION - ASIA  
 SITE - GANNCURWA  
 COUNTRY - SRI LANKA  
 LATITUDE - 7 DEG 15' MIN. N  
 ELEVATION - 457 M  
 COOPERATIVES - B.N. EMERSON, C.D. DHARMASENA  
 DATE PLANTED - NOVEMBER 15, 1975  
 LONGITUDE - 80 DEG. E  
 SCIL TYPE - CLAY, PH 5.7  
 DATE HARVESTED - FEBRUARY, 1976  
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2  
 AMOUNT OF MOISTURE - 391 MM  
 NUMBER OF IRRIGATIONS - 6  
 SUBSTITUTION VARIETIES - BRAGG, HILL, BONUS  
 LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	2187.94	30.50	90.50	130.00	458.50	0.29	2.24	38.05	1.00
15	S.J.2	2167.10	34.00	95.75	142.25	467.75	0.47	2.08	52.70	1.00
7	DAVIS	2000.40	29.75	111.75	124.25	522.70	0.51	2.30	30.23	1.00
4	IMPROVED PELICAN	1812.86	33.75	91.75	192.50	452.00	0.44	1.92	41.15	1.00
3	HARDEE	1781.61	31.25	98.25	181.50	435.25	0.53	2.20	30.78	1.00
10	HILL	1708.67	28.75	88.75	162.25	439.00	0.27	1.76	35.40	1.00
5	BOSSIER	1687.84	34.25	92.25	243.25	633.75	0.53	2.04	40.58	1.00
2	HAMPTON 266A	1667.00	30.50	88.75	188.75	525.50	0.30	2.02	25.73	1.00
11	CLARK 63	1625.32	30.00	86.00	106.00	291.75	0.22	1.97	29.85	1.00
6	BRAGG	1573.23	28.75	86.25	112.00	572.75	0.20	2.30	30.55	1.00
12	BONUS	1531.56	28.75	85.75	99.50	405.00	0.19	1.69	26.50	1.00
13	WILLIAMS	1521.14	27.00	86.00	193.00	369.25	0.27	2.07	26.18	1.00
8	TRACY	1396.11	28.75	81.75	184.25	288.75	0.29	1.65	24.90	1.00
1	JUPITER	1291.92	35.00	104.00	245.75	405.00	0.44	1.53	68.72	1.00
14	PB-1	1052.29	27.50	81.75	216.75	420.50	0.46	2.28	28.55	1.00
GRAND MEAN										
1667.00										
STANDARD ERROR OF A VARIETY MEAN										
148.60										
COEFFICIENT OF VARIATION										
17.83%										
SRI ISI VARIETY MEANS (*****=NS)										
424.10										
CORRELATIONS										
(+ - PROE=.05 ** - FSCD=.01)										
YIELD	KG/HA	1.00	0.25	0.29+	-0.10	0.29+	0.30+	0.47++	0.20	0.00
DAYS TO FLOWER	1.00	1.00	0.63++	0.38++	0.11	0.23	0.46++	-0.05	0.74++	0.00
DAYS TO MATURITY	0.29+	0.29+	0.63++	1.00	0.11	0.23	0.40++	-0.04	0.61++	0.00
NODULE NUMBER 1	-0.10	0.29+	0.38++	0.11	0.00	0.17	0.66++	0.19	0.32+	0.00
NODULE NUMBER 2	0.29+	0.29+	0.63++	0.38++	0.11	0.23	0.40++	-0.04	0.61++	0.00
NODULE WEIGHT 1	0.30+	0.46++	0.46++	0.66++	0.19	0.23	0.38++	0.52++	0.15	0.00
NODULE WEIGHT 2	0.47++	-0.05	-0.04	0.19	0.52++	0.38++	1.00	0.46++	0.34++	0.00
PLANT HEIGHT	0.20	0.74++	0.61++	0.32+	0.15	0.15	0.34++	-0.06	0.06	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.05	0.08	0.17	-0.03	0.01	0.01	-0.07	-0.14	0.13	0.00
PODS PER PLANT	3.66++	0.37++	0.35++	0.06	0.14	0.14	0.42++	0.35++	0.40++	0.00
100 SEED WEIGHT	0.35++	-0.21	0.09	-0.24	0.13	0.13	-0.17	0.20	-0.23	0.00
QUALITY OF SEED	0.00	-0.07	-0.09	-0.22	-0.04	-0.04	-0.19	-0.06	-0.09	0.00

TABLE 131 EXPERIMENT 37E YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	FORREST	1.00	300.50	17.43	15.15	1.00
15	S.J.2	1.00	300.00	19.60	13.60	1.00
7	DAVIS	1.00	300.50	14.10	18.93	1.00
4	IMPROVED PELICAN	1.00	300.50	15.00	13.45	1.00
3	HARDEY	1.00	300.75	18.28	14.98	1.00
10	HILL	1.00	301.00	12.20	14.93	1.00
5	BOSSIER	1.00	300.25	13.23	14.98	1.00
2	HAMPTON 26GA	1.00	301.00	11.70	18.18	1.00
11	CLARK 63	1.00	295.50	12.83	16.83	1.00
6	SPAGG	1.00	300.75	10.68	17.25	1.00
12	BONUS	1.00	300.50	11.20	18.03	1.25
13	WILLIAMS	1.00	300.25	11.70	18.75	1.00
8	TEACY	1.00	300.00	11.83	15.83	1.00
1	JUPITER	1.00	301.00	12.63	15.20	1.00
14	PE-1	1.00	300.50	13.80	10.00	1.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	300.47	13.74	15.74	1.02
COEFFICIENT OF VARIATION		0.00	0.57	1.07	0.55	0.06
5% LST VARIETY MEANS (*****=NS)		0.00	0.38%	15.58%	6.93%	12.70%
		0.00	*****	3.06	1.56	*****
C C R E L A T I O N S (+ - PROB=.05)						
YIELD KG/HA						
DAYS TO FLOWER	0.00	0.05	0.66++	0.35++	0.00	0.00
DAYS TO MATURITY	0.00	0.17	0.37++	0.09	-0.21	-0.07
NCDULE NUMBER 1	0.00	-0.03	0.06	-0.24	-0.09	-0.09
NCDULE NUMBER 2	0.00	0.01	0.14	0.13	-0.04	-0.04
NCDULE WEIGHT 1	0.00	-0.07	0.42++	-0.17	-0.19	-0.19
NCDULE WEIGHT 2	0.00	-0.14	0.35++	0.20	-0.06	-0.06
ELANT	0.00	0.13	0.40++	-0.23	-0.09	-0.09
HEIGHT	0.00	0.00	0.00	0.00	0.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.00	0.01	-0.01	1.00	0.06	-0.06
100 SEED WEIGHT	0.00	0.08	-0.02	-0.22	-0.04	-0.04
QUALITY OF SEED	0.00	-0.06	-0.04	0.14	0.14	1.00



TABLE 132 EXPERIMENT 65C YEAR 1975

REGION - ASIA  
 SITE - KILINOCHCHI  
 LATITUDE - 9 DEG. 2 MIN. N  
 COOPERATOR - N. KANAGANAYAGAM  
 DATE PLANTED - FEBRUARY 3, 1976  
 SOIL TYPE - SANDY  
 FERTILIZER USED (KG/HA) - N 23., P 26.4, K 33.2  
 AMOUNT OF MOISTURE - 178 MM  
 NUMBER OF IRRIGATIONS - SEVERAL  
 SUBSTITUTE VARIETIES - BRAGG, HILL, BONUS  
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA  
 ELEVATION - 9 M  
 LONGITUDE - 80 DEG. 5 MIN. E  
 DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS-TC FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NCDULE NUMBER 2	NODULE WEIGHT 1	NCDULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	4470.69	35.03	102.03	130.50	370.75	0.72	3.37	64.25	1.00
7	DAVIS	4335.37	34.00	102.50	144.00	261.75	1.25	3.66	61.00	1.00
6	BRAGG	3695.77	30.00	94.00	74.00	358.25	0.28	2.31	43.00	1.00
8	TRACY	3676.52	30.00	87.00	105.75	197.75	0.44	2.38	39.50	1.00
13	WILLIAMS	3571.07	28.00	87.75	148.25	220.50	0.51	2.24	60.00	1.00
9	FOREST	3570.59	34.00	91.00	104.75	226.00	0.43	2.16	46.50	1.00
14	PB-1	3364.14	34.00	90.00	203.75	289.00	0.65	2.51	55.25	1.00
4	IMPROVED PELICAN	3313.75	38.00	103.00	64.50	278.75	0.60	2.47	109.50	3.00
11	CLARK 63	3252.12	37.00	90.00	183.00	245.00	1.14	3.34	66.00	2.50
15	S.J.2	3193.08	37.00	103.00	86.50	317.50	0.56	2.43	95.00	3.75
5	BOSSIER	3159.30	36.00	90.00	112.00	302.00	0.80	4.38	55.50	1.00
10	HILL	2920.15	35.00	91.00	91.50	157.25	0.50	2.20	45.75	1.00
2	HAMPTON 266A	2703.04	31.00	100.00	119.50	253.75	0.35	3.05	48.75	1.00
12	BONUS	2661.34	29.00	91.00	92.00	168.00	0.25	2.14	55.00	1.00
1	JUPIER	2565.26	44.00	117.00	104.75	372.75	0.97	4.42	88.00	2.75
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		3363.75	34.13	95.95	117.65	267.93	0.63	2.87	62.20	1.53
COEFFICIENT OF VARIATION		184.40	0.00	0.44	13.74	36.01	0.10	0.36	2.06	0.16
5% ISI VARIETY MEANS (*****=NS)		10.96%	0.00%	0.91%	23.36%	26.88%	30.63%	25.19%	6.63%	20.38%
		526.30	0.00	1.25	39.22	102.78	0.28	1.03	5.89	0.45
CORRELATIONS										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	-0.19	-0.09	0.16	0.21	0.17	-0.03	-0.09	-0.20
DAYS TO FLOWER		-0.19	1.00	0.69**	-0.04	0.34**	0.51**	0.45**	0.65**	0.65**
DAYS TO MATURITY		-0.09	0.69**	1.00	-0.21	0.44**	0.32*	0.38**	0.64**	0.53**
NODULE NUMBER 1		0.16	-0.04	-0.21	1.00	0.13	0.51**	0.15	-0.20	-0.21
NODULE NUMBER 2		0.21	0.34**	0.44**	0.13	1.00	0.26*	0.61**	0.29*	0.18
NODULE WEIGHT 1		0.17	0.51**	0.32*	0.51**	0.26*	1.00	0.50**	0.24	0.22
NODULE WEIGHT 2		-0.03	0.45**	0.38**	0.15	0.61**	0.50**	1.00	0.19	0.08
PLANT HEIGHT		-0.09	0.65**	0.64**	-0.20	0.29*	0.24	0.19	1.00	0.84**
LODGING		-0.20	0.65**	0.53**	-0.21	0.18	0.22	0.08	0.84**	1.00
SHAWER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.69**	-0.19	-0.33*	0.16	0.03	0.06	-0.30*	0.02	0.06
PODS PER PLANT		-0.48**	0.57**	0.49**	0.09	0.22	0.22	0.47**	0.23	0.16
100 SEED WEIGHT		-0.01	0.08	0.39**	-0.08	0.24	0.13	0.44**	-0.18	-0.21
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 132 EXPERIMENT 656 YEAR 1975 (CONTINUED)

ENTRY NO	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
3	HARDEE	1.00	282.75	32.28	15.34	1.00
7	DAVIS	1.00	277.00	28.13	19.56	1.00
6	BRAGG	1.00	288.50	21.73	19.29	1.00
8	TRACY	1.00	284.00	28.53	18.84	1.00
13	WILLIAMS	1.00	288.00	26.43	17.55	1.00
5	FORREST	1.00	289.75	29.50	15.79	1.00
14	PB-1	1.00	284.50	40.50	13.11	1.00
4	IMPROVED PELICAN	1.00	282.25	29.03	14.83	1.00
11	CLARK 63	1.00	284.75	31.70	17.17	1.00
15	S.J.2	1.00	289.75	27.88	14.33	1.00
5	BOSSIER	1.00	186.00	38.63	19.35	1.00
10	HILL	1.00	188.50	35.80	18.85	1.00
2	HAMPTON 266A	1.00	123.00	35.00	21.52	1.00
12	BCNUS	1.00	109.00	40.18	17.85	1.00
1	JUPITER	1.00	85.75	70.95	23.18	1.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% ISI VARIETY MEANS (*****=NS)						
		0.00	26.31	7.55	1.42	0.00
		0.00%	7.80%	15.37%	5.54%	0.00%
		0.00	9.22	2.65	1.50	0.00
		0.00	236.23	34.41	17.50	1.00
C C K E L A T I O N S						
		(+ - PROB=.05	++ - PROB=.01)			
	YIELD KG/HA	0.00	0.69++	-0.48++	-0.01	0.00
	DAYS TO FLOWER	0.00	-0.19	0.57++	0.08	0.00
	DAYS TO MATURITY	0.00	-3.33+	3.49++	0.39++	0.00
	NODULE NUMBER 1	0.00	0.16	0.09	-0.08	0.00
	NODULE NUMBER 2	0.00	0.03	0.22	0.24	0.00
	NODULE WEIGHT 1	0.00	0.06	0.22	0.13	0.00
	NODULE WEIGHT 2	0.00	-0.30+	0.47++	0.44++	0.00
	PLANT HEIGHT	0.00	0.06	0.22	0.13	0.00
	LODGING	0.00	0.06	0.22	0.13	0.00
	SHATTER	0.00	0.06	0.22	0.13	0.00
	PLANTS HARVEST	0.00	1.00	-0.70++	-0.54++	0.00
	PODS PER PLANT	0.00	-0.70++	1.00	0.40++	0.00
	100 SEED WEIGHT	0.00	-0.54++	0.40++	1.00	0.00
	QUALITY OF SEED	0.00	0.00	0.00	0.00	1.00



TABLE 133 EXPERIMENT 659 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
4	IMPROVEL PELICAN	1.00	193.50	23.27	13.44	1.00	44.5	22.6
11	CLARK 63	2.00	186.00	16.75	13.16	1.00	47.2	20.8
15	S.J.2	1.00	207.50	22.75	10.44	1.00	43.2	22.0
5	BOSSIER	1.00	173.25	13.55	12.26	1.00	44.4	23.5
13	WILLIAMS	1.00	166.25	14.15	15.25	1.00	44.9	23.9
3	HARDEE	1.00	146.75	18.18	12.20	1.00	42.8	24.0
7	DAVIS	1.00	172.25	14.18	13.54	1.00	44.1	22.8
12	BONUS	1.00	141.50	13.65	14.32	1.00	46.2	21.8
6	BRAGG	1.00	208.50	13.85	13.50	1.00	44.1	23.2
14	PB-1	1.00	206.00	21.50	9.65	1.00	44.2	19.8
10	HILL	1.00	162.00	23.88	11.44	1.00	45.4	20.9
9	FORREST	1.00	175.75	19.28	11.49	1.00	44.6	23.4
2	HAMPTON 266A	1.00	128.50	18.78	15.47	1.00	41.2	25.5
8	TRACY	1.00	140.75	14.63	14.34	1.00	47.7	20.2
1	JUPITER	1.00	152.00	20.22	13.52	1.00	43.9	24.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.20	0.54++	-0.06	-0.24	0.00		
DAYS TO FLOWER		-0.13	0.18	0.46++	-3.35++	0.33		
DAYS TO MATURITY		-0.01	0.06	0.33++	-0.16	0.00		
NODULE NUMBER 1		0.22	0.31+	-0.37	-0.16	0.00		
NODULE NUMBER 2		0.22	0.34++	-0.03	-0.19	0.00		
NODULE HEIGHT 1		0.20	0.14	0.17	-0.06	0.00		
NODULE HEIGHT 2		0.29+	0.20	0.11	-3.19	0.33		
PLANT HEIGHT		0.23	0.43++	0.43++	-0.41++	0.00		
LODGING		0.33	3.33	3.33	3.33	3.33		
SHATTER		1.00	0.12	-0.05	0.06	0.00		
PLANTS HARVEST		3.12	1.33	3.35	-3.48++	0.00		
PODS PER PLANT		-0.05	0.05	1.00	-0.56++	0.00		
100 SEED WEIGHT		0.06	-0.48++	-0.56++	1.00	0.00		
QUALITY OF SEED		0.00	0.00	0.00	3.33	1.33		

TABLE 134 EXPERIMENT 661 YEAR 1975

REGION - ASIA  
 SITE - MCNEFAGALA  
 LATITUDE - 6 DEG. 45 MIN. N  
 COUNTRY - SRI LANKA  
 ELEVATION - 184 M  
 LONGITUDE - 81 DEG. 15 MIN. E  
 COOPERATOR - L.G. HEAL  
 DATE PLANTED - NOVEMBER 16, 1975  
 DATE HARVESTED - FEBRUARY, 1976  
 FERTILIZER USED (KG/HA) - N 22.4, P 39.1, K 74.4  
 AMOUNT OF MOISTURE - 432 MM  
 NUMBER OF IRRIGATIONS - 4  
 SUBSTITUTION VARIETIES - BRAGG, HILL, BONUS  
 LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO Maturity	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICIGING
7	DAVIS	3200.64	30.00	98.75	186.50	272.25	1.14	2.66	31.75	1.00
5	BCSSIER	3132.29	40.00	96.75	63.75	210.75	0.69	3.45	51.25	1.00
3	HARDEE	2917.25	30.00	100.00	112.25	336.75	0.98	2.11	33.50	1.00
13	WILLIAMS	2719.71	30.00	92.00	110.50	194.50	0.63	3.38	35.25	1.25
6	BRA3G	2675.12	30.00	98.75	142.50	343.25	0.83	3.58	36.50	1.00
4	IMPROVED PELICAN	2649.70	40.00	95.00	50.25	266.00	0.37	3.00	58.00	1.00
2	HAMPTON 266A	2631.35	30.00	95.50	143.75	211.00	1.02	2.20	25.25	1.00
14	PE-1	2594.27	30.00	92.00	183.00	343.75	1.31	5.62	46.00	1.00
15	S.J.2	2573.85	40.00	100.00	61.00	187.50	0.47	3.39	51.00	1.00
1	JUPITER	2501.33	47.00	107.00	89.75	292.00	0.49	1.75	60.50	1.00
9	FOREST	2442.57	30.00	95.00	101.25	276.50	0.58	3.13	32.00	1.00
8	TRACY	2392.56	30.00	92.00	100.50	145.25	0.61	2.55	26.50	1.00
10	HILL	2262.54	30.00	92.00	99.00	189.75	0.70	3.05	33.25	1.00
12	BONUS	2146.66	30.00	95.00	110.00	273.50	0.83	3.75	32.00	1.00
11	CLARK 63	1657.83	30.00	92.00	125.00	149.75	1.21	2.90	50.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.13	0.29+	0.08	0.23	0.06	-0.07	0.07	-0.36
DAYS TO FLOWER	0.13	1.00	0.66++	-0.45++	-0.05	-0.05	-0.43++	-0.18	0.78++	-0.08
DAYS TO MATURITY	0.29+	0.66++	1.00	-0.15	0.31+	0.41++	-0.22	-0.33+	0.39++	-0.13
NODULE NUMBER 1	0.08	-0.45++	-0.15	1.00	0.41++	0.08	0.73++	0.16	-0.35++	0.08
NODULE NUMBER 2	0.23	-0.05	0.31+	0.41++	0.41++	1.00	0.28+	0.36++	0.02	0.00
NODULE WEIGHT 1	0.06	-0.43++	-0.22	0.31++	0.28+	0.28+	1.00	0.21	-0.23	-0.21
NODULE WEIGHT 2	-0.07	-0.18	-0.33+	0.16	0.36++	0.36++	0.21	1.00	0.08	0.01
PLANT HEIGHT	0.07	0.78++	0.39++	-0.35++	0.32	0.08	-0.23	0.08	1.00	-0.06
LODGING	-0.06	-0.08	-0.13	0.08	0.00	0.01	-0.21	0.01	-0.06	1.00
SHATTER	-0.45++	-0.27+	-0.42++	0.22	-0.14	0.31+	0.21	0.09	-0.06	-0.06
HARVEST	0.50++	-0.14	0.09	0.07	0.20	0.05	0.04	-0.13	-0.13	-0.20
PODS PER PLANT	0.06	0.60++	0.28+	-0.13	-0.00	-0.09	-0.08	-0.59++	-0.12	-0.12
100 SEED WEIGHT	0.32+	-0.12	0.24	0.07	0.09	-0.39++	-0.31+	-0.31+	-0.31+	0.06
QUALITY OF SEED	-0.17	-0.05	0.13	0.02	-0.02	-0.02	0.00	-0.25	-0.26+	0.00

TABLE 134 EXPERIMENT 661 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	DAVIS	1.00	291.25	16.53	22.73	2.00
5	BOSSIER	1.00	279.50	16.48	22.85	2.00
3	HARDEE	1.00	294.00	16.30	21.25	2.00
13	WILLIAMS	1.00	249.75	17.88	23.03	2.00
6	BRAGG	1.00	266.75	15.75	23.18	2.00
4	IMPROVED FELICAN	1.00	254.00	25.00	18.00	1.00
2	HAMPTON 266A	1.00	273.50	19.53	23.85	2.00
14	PB-1	2.25	275.00	23.80	14.50	1.00
15	S.J.2	1.00	255.50	22.03	16.43	1.00
1	JUPITER	1.00	245.00	31.38	20.95	3.00
5	FCRREST	1.00	281.50	18.75	19.05	1.00
8	TRACY	1.50	275.75	17.00	20.95	3.00
10	HILL	1.25	240.50	20.13	17.13	2.00
12	DCNUS	1.50	228.50	18.53	21.90	4.00
11	CLARK 63	3.00	251.00	18.88	19.85	2.00
GRAND MEAN						
		1.30	264.03	19.86	21.37	2.00
STANDARD ERROR OF A VARIETY MEAN						
		0.17	14.24	1.22	0.50	0.00
COEFFICIENT OF VARIATION						
		25.91%	10.79%	12.33%	4.88%	0.00%
5% ISI VARIETY MEANS (*****=NS)						
		0.48	*****	3.50	1.42	0.00
C C R R E I A T I O N S (+ - PROB=.05) ** - PROB=.01)						
YIELD	KG/HA	-0.45**	0.50**	0.06	0.32+	-0.17
DAYS TO FLOWER		-0.27+	-0.14	0.60**	-0.12	-0.05
DAYS TO MATURITY		-0.42**	0.09	0.28+	0.24	0.13
NODULE NUMBER 1		0.22	0.07	-0.13	0.07	0.02
NODULE NUMBER 2		-0.14	0.20	-0.00	0.09	-0.02
NODULE WEIGHT 1		0.31+	0.05	-0.09	0.04	0.00
NODULE WEIGHT 2		0.21	0.04	-0.08	-0.39**	-0.25
PLANT	HEIGHT	0.09	-0.13	0.59**	-0.31+	-0.26+
LODGING		-0.06	-0.20	-0.12	0.06	0.0
SHATTER		1.00	-0.02	-0.03	-0.30+	0.03
PODS PER HARVEST		-0.02	1.00	-0.28+	0.15	-0.23
PLANTS	PER PLANT	-0.03	-0.28+	1.00	-0.33+	-0.07
100 SEED WEIGHT		-0.30+	0.15	-0.33+	1.00	0.50**
QUALITY OF SEED		0.03	-0.23	-0.07	0.50**	1.00



TABLE 135 EXPERIMENT 658 YEAR 1975

REGION - ASIA  
 SITE - PUTTALAM  
 LATITUDE - 8 DEG. 2 MIN. N  
 LONGITUDE - 79 DEG. 5 MIN. E  
 COUNTRY - SRI LANKA  
 COOPERATORS - S. THIVIANATHAN, K. THURAIRATNAM  
 DATE PLANTED - NOVEMBER 11, 1975  
 DATE HARVESTED - FEBRUARY, 1976  
 SOIL TYPE - SAND 60%, SILT 20%, CLAY 20%  
 FERTILIZER USED (KG/HA) - P 17.6, K 49.8  
 SUBSTITUTION VARIETIES - BRAGG, HILL, BONUS  
 LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICIGING
7	DAVIS	2514.67	30.00	95.00	112.75	150.00	1.02	0.00	0.00	0.00	31.00	1.00
6	BRAGG	2329.63	30.00	98.00	121.50	187.00	0.96	0.00	0.00	0.00	34.50	1.50
8	TRACY	2292.12	30.00	84.00	105.25	127.75	0.98	0.00	0.00	0.00	27.00	1.25
3	HARDEE	2266.70	32.00	95.00	123.00	223.25	0.84	0.00	0.00	0.00	31.25	1.00
13	WILLIAMS	2250.45	30.00	87.00	155.75	178.25	0.73	0.00	0.00	0.00	33.83	1.25
5	BOSSIER	2196.27	32.00	98.00	160.25	220.50	1.32	0.00	0.00	0.00	46.50	2.25
4	IMPROVED PELICAN	2077.50	33.00	95.00	71.50	76.50	0.68	0.00	0.00	0.00	39.00	1.75
9	FORREST	1925.38	30.00	95.00	121.25	142.00	0.85	0.00	0.00	0.00	35.75	1.50
14	PB-1	1839.95	30.00	84.00	135.25	163.00	1.01	0.00	0.00	0.00	47.25	2.75
10	HILL	1800.36	31.00	84.00	130.00	113.75	0.75	0.00	0.00	0.00	39.25	2.50
1	JUPITER	1787.86	35.00	101.00	98.25	148.00	0.83	0.00	0.00	0.00	65.25	2.00
11	CLARK 63	1746.18	32.00	84.00	120.25	117.00	1.16	0.00	0.00	0.00	52.50	2.00
15	S.J.2	1647.41	35.00	95.00	99.75	105.00	0.53	0.00	0.00	0.00	50.75	2.00
2	HAMPTON 266A	1596.15	30.00	87.00	139.75	180.50	0.94	0.00	0.00	0.00	27.25	1.00
12	BONUS	1246.08	30.00	87.00	147.00	135.00	0.62	0.00	0.00	0.00	30.25	1.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% ISI VARIETY MEANS (*****=NS)												
C O R R E L A T I O N S												
(+ - PROE=.05 +- - FCB=.01)												
YIELD	KG/HA	1.00	-0.14	0.23	0.05	0.34++	0.36++	0.00	0.00	0.00	-0.13	-0.04
DAYS TO FLOWER	1.00	-0.14	1.00	0.50++	-0.31+	0.19	0.02	0.00	0.00	0.00	0.69++	0.29+
DAYS TO MATURITY	0.23	0.23	1.00	1.00	-0.19	0.17	0.05	0.00	0.00	0.00	0.29+	-0.06
NODULE NUMBER 1	0.05	-0.31+	-0.19	-0.19	1.00	0.26+	0.34++	0.00	0.00	0.00	-0.14	0.03
NODULE NUMBER 2	0.34++	-0.19	0.17	0.17	0.26+	1.00	0.30+	0.00	0.00	0.00	-0.07	-0.22
NODULE WEIGHT 1	0.36++	0.02	0.05	0.05	0.34++	0.30+	1.00	0.00	0.00	0.00	0.18	0.11
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.30+	0.00	1.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.13	0.69++	0.29+	-0.14	-0.07	0.18	0.00	0.00	0.00	1.00	0.52++
LODGING	HEIGHT	-0.04	0.29+	-0.06	0.03	-0.22	0.11	0.00	0.00	0.00	0.52++	1.00
SHATTER	HEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	PLANT	0.46++	0.06	0.04	-0.11	0.06	0.20	0.00	0.00	0.00	0.17	0.27+
PODS PER	PLANT	-0.14	0.55++	0.31+	-0.17	-0.05	0.02	0.00	0.00	0.00	0.34++	0.03
100 SEED	WEIGHT	-0.21	-0.26+	-0.29+	0.02	0.13	-0.09	0.00	0.00	0.00	-0.27+	-0.44++
QUALITY	OF SEED	-0.04	-0.00	0.21	-0.25	-0.17	-0.22	0.00	0.00	0.00	0.07	-0.17

TABIF 13S EXPERIMENT 658 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	DAVIS	1.00	358.25	15.33	18.73	2.25
8	BRAGG	1.00	353.25	11.45	21.07	2.25
9	TRACY	1.00	369.50	11.03	20.90	2.00
10	HARDEE	1.00	341.75	19.13	19.18	2.00
11	WILLIAMS	1.00	311.25	12.83	23.29	2.00
12	BOSSIER	1.00	354.25	15.15	16.19	1.50
13	IMPROVED PELICAN	1.00	303.50	21.67	16.73	2.25
14	FORREST	1.00	297.75	17.15	18.08	3.50
15	PB-1	1.00	349.25	16.90	17.25	1.00
16	HILL	1.00	347.25	13.80	17.20	2.50
17	JUPITER	1.00	274.50	20.85	18.13	2.75
18	CLARK 63	1.00	349.50	15.03	21.09	2.25
19	S.O.2	1.00	347.25	22.58	15.58	1.75
20	HAMPTON 266A	1.00	204.75	21.35	23.03	1.50
21	BONUS	1.00	210.00	15.33	22.18	2.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	318.13	16.64	19.51	2.12
COEFFICIENT OF VARIATION		0.00	21.48	1.19	1.19	0.30
5% ISI VARIETY MEANS (*****=NS)		0.00%	13.53%	14.32%	12.16%	28.37%
		0.00	61.31	3.40	3.35	0.85
C C R R E L A T I O N S (+ - PROB=.01)						
YIELD KG/HA		0.00	0.46++	-0.14	-0.21	-0.04
DAYS TO FLOWER		0.00	0.36	0.55++	-0.26+	-0.00
DAYS TO MATURITY		0.00	0.04	0.31+	-0.29+	0.21
NODULE NUMBER 1		0.00	-0.11	-0.17	0.02	-0.25
NODULE NUMBER 2		0.00	0.06	-0.05	0.13	-0.17
NODULE WEIGHT 1		0.00	0.20	0.02	-0.09	-0.22
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.17	0.34++	-0.27+	0.07
LSDGING		0.00	0.27+	0.03	-0.44++	-0.17
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.33++	-0.24	-0.10
PODS PER PLANT		0.00	-0.38++	1.00	-0.17	-0.03
100 SEED WEIGHT		0.00	-0.24	-0.17	1.00	-0.01
QUALITY CF SEED		0.00	-0.10	-0.03	-0.01	1.00

TABLE 136 EXPERIMENT 369 YEAR 1975

REGION - ASIA COUNTRY - SRI LANKA  
 SITE - RATHMALAGARA ELEVATION - 30 M  
 LATITUDE - 7 DEG. 23 MIN. N LONGITUDE - 79 DEG. 51 MIN. E  
 COOPERATORS - K. KARUNANAYASA, A. SIRINIMAL  
 DATE PLANTED - JUNE 3, 1975 DATE HARVESTED - SEPTEMBER, 1975  
 SOIL TYPE - SILT  
 FERTILIZER USED (KG/HA) - N 21.5, P 62.1, K 66.6  
 AMOUNT OF MOISTURE - 437 MM  
 NUMBER OF IRRIGATIONS - 4  
 LOCAL VARIETIES - PB-1, S.J.2  
 SUBSTITUTE VARIETIES - BRAGG, HILL, BONUS

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
2	HARDEF	684.30	34.00	97.00	15.75	50.25	0.08	0.26	30.00	1.00
12	WILLIAMS	587.62	27.00	89.75	18.00	50.75	0.05	0.28	27.23	1.00
5	BRAGG	518.02	29.00	101.50	21.25	64.75	0.05	0.24	27.83	1.00
1	HAMPTON 266A	515.10	29.00	99.50	10.50	41.75	0.02	0.18	23.85	1.00
8	PORREST	488.01	30.25	85.50	16.50	48.00	0.04	0.25	27.25	1.00
10	CLARK 63	477.18	34.00	90.25	13.75	24.25	0.07	0.24	33.25	1.00
11	BONUS	449.67	28.75	101.00	22.00	54.50	0.07	0.26	22.46	1.00
9	HILL	438.00	29.00	83.00	9.50	18.00	0.04	0.13	28.60	1.00
3	IMPROVED PELICAN	428.63	35.00	100.00	23.50	66.75	0.09	0.33	35.28	1.00
6	DAVIS	395.91	31.50	104.00	12.50	59.25	0.06	0.24	23.24	1.00
13	PB-1	387.99	34.25	94.75	22.00	64.50	0.10	0.41	31.68	1.00
4	BOSSIER	375.07	32.25	100.50	14.50	37.00	0.04	0.25	26.96	1.00
7	TRACY	284.22	27.00	98.75	18.75	32.00	0.07	0.20	20.20	1.00
14	S.J.2	277.97	34.00	102.25	7.75	20.75	0.04	0.13	37.14	1.00
GRAND MEAN		450.55	31.07	96.27	16.16	45.18	0.06	0.24	28.21	1.00
STANDARD ERROR OF A VARIETY MEAN		101.49	0.87	2.62	4.89	10.60	0.02	0.08	2.50	0.00
COEFFICIENT OF VARIATION		45.05%	5.59%	5.45%	60.53%	46.94%	61.39%	65.00%	17.71%	0.00%
5% LSD VARIETY MEANS (*****=NS)		*****	2.49	7.50	*****	30.33	*****	*****	7.15	0.00
CORRELATIONS										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.16	1.00							
DAYS TO MATURITY		-0.29+	0.17	1.00						
MODULE NUMBER 1		0.02	-0.01	0.39++	1.00					
MODULE NUMBER 2		0.40++	-0.03	0.21	0.48++	1.00				
MODULE WEIGHT 1		-0.07	0.30+	0.29+	0.71++	0.37++	1.00			
MODULE WEIGHT 2		0.12	0.15	0.01	0.39++	0.74++	0.57++	1.00		
PLANT		0.29+	0.40++	-0.16	-0.09	0.05	0.04	0.10	1.00	
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.33+	-0.05	0.01	0.02	0.17	-0.08	0.19	0.28+	0.00
PODS PER PLANT		0.56++	0.37++	-0.14.	-0.03	0.22	0.10	0.19	0.63++	0.00
100 SEED WEIGHT		0.06	-0.58++	0.22	0.14	0.07	-0.04	-0.12	-0.49++	0.00
QUALITY OF SEED		-0.10	-0.08	-0.18	-0.00	-0.03	-0.08	-0.04	-0.05	0.00
DISEASE I		-0.26	0.08	0.35++	0.16	-0.02	-0.01	-0.01	0.02	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		-0.24	-0.24	-0.16	0.08	-0.14	-0.05	-0.07	-0.19	0.00



TABLE 137

EXPERIMENT 372

YEAR 1975

REGION - ASIA  
 SITE - THIRUNELVELY  
 LATITUDE - 9 DEG. 6 MIN. N  
 COOPERATOR - J.S. SELVARATNAM  
 DATE PLANTED - MAY 13, 1975  
 SOIL TYPE - SANDY LOAM, PH 7.0  
 FERTILIZER USED (KG/HA) - N 22.0, P 66.0, K 44.0  
 AMOUNT OF MOISTURE - 144 MM  
 NUMBER OF IRRIGATIONS - 20  
 LOCAL VARIETIES - PB-1, S.J.2  
 SUBSTITUTE VARIETIES - BRAGG, HILL, BONUS

COUNTRY - SRI LANKA  
 ELEVATION - 0.6 M  
 LONGITUDE - 80 DEG. 2 MIN. E  
 DATE HARVESTED - AUGUST, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PIANT HEIGHT	LOGGING
3	HARDEE	6053.75	34.00	113.00	44.25	147.25	0.23	1.09	49.25	1.00
11	CLARK 63	5677.90	27.00	91.00	24.50	74.25	0.21	0.50	65.00	1.00
14	PB-1	5658.71	44.00	105.00	146.50	272.75	0.45	2.22	64.25	1.00
5	BRAGG	5595.86	43.00	113.00	93.00	206.50	0.47	1.33	63.00	1.00
6	BOSSIER	5386.26	36.00	105.00	18.00	87.25	0.06	0.70	36.25	1.00
9	FORREST	5263.08	27.00	97.00	34.00	117.50	0.17	1.03	38.50	1.00
2	HAMPTON 266A	5221.55	29.00	110.00	11.50	105.00	0.11	0.58	31.50	1.00
13	WILLIAMS	5114.94	27.00	95.00	27.75	63.25	0.27	0.39	66.50	1.00
/	DAVIS	4990.84	29.00	98.00	35.75	167.00	0.26	1.49	38.75	1.00
8	TRACY	4951.95	24.00	97.00	37.50	87.50	0.29	1.06	48.50	1.00
12	BONUS	4845.05	29.00	105.00	26.25	103.75	0.22	1.04	62.50	1.00
1	JUPITER	4408.69	48.00	125.00	31.75	112.00	0.19	0.86	66.50	1.00
15	S.J.2	4075.79	35.00	105.00	38.50	69.25	0.21	0.54	72.25	1.00
4	IMPROVED PELICAN	3783.96	41.75	112.00	16.50	42.00	0.10	0.20	98.00	1.00
10	HILL	2722.27	30.00	110.00	22.00	121.25	0.12	1.00	37.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		4916.71	33.58	105.40	40.52	118.43	0.22	0.94	55.90	1.00
COEFFICIENT OF VARIATION		269.24	0.19	0.00	10.00	27.49	0.07	0.25	2.77	0.00
5% LSD VARIETY MEANS (*****NS)		10.95%	1.15%	0.00%	49.39%	46.42%	67.19%	53.62%	9.92%	0.00%
		768.41	0.55	0.00	28.55	78.45	0.21	0.72	7.91	0.00
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.04								
DAYS TO MATURITY		1.00								
NODULE NUMBER 1		0.24								
NODULE NUMBER 2		0.76++								
NODULE WEIGHT 1		0.07								
NODULE WEIGHT 2		0.43++								
PLANT HEIGHT		0.30+								
LOGGING		0.15								
SHATTER		0.17								
HARVEST		0.47++								
PLANT		0.00								
PODS PER 100 SEED		0.00								
WEIGHT		0.00								
QUALITY OF SEED		-0.04								
DISEASE I		0.15								
DISEASE II		0.00								
DISEASE III		0.00								



TABLE 137

EXPERIMENT 372

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEE	1.00	200.00	42.75	20.66	0.00	46.7	22.0
11	CIARK 63	1.00	199.50	37.50	21.88	0.00	46.9	21.5
14	PB-1	1.00	199.00	58.75	15.75	0.00	46.0	20.4
5	BRAAG	1.00	199.50	35.50	20.75	0.00	48.1	21.4
6	BOSSIER	1.00	199.75	36.50	19.98	0.00	44.4	22.7
9	PORREST	1.00	199.75	38.25	18.23	0.00	45.9	22.7
2	HAMPTON 266A	1.00	199.25	42.75	24.58	0.00	43.5	25.9
13	WILLIAMS	1.00	199.25	35.25	20.13	0.00	43.0	23.2
7	DAVIS	1.00	199.00	40.75	20.18	0.00	45.1	21.3
8	TPACY	1.00	199.50	29.25	24.18	0.00	47.4	20.0
12	BONUS	1.00	200.00	35.75	22.40	0.00	45.0	23.0
1	JUPITER	1.00	199.50	41.00	22.38	0.00	45.5	24.2
15	S.J.2	1.00	199.50	51.25	15.50	0.00	45.7	21.9
4	IMPROVED PELICAN	1.00	199.75	49.00	16.81	0.00	47.0	21.0
10	HILL	1.00	199.75	27.00	21.49	0.00	47.0	19.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
0.00% 0.42% 12.56% 6.08% 0.00% 0.00% 0.00% 0.00% 0.00%								
0.00 ***** 7.18 1.76 0.00								
C O R R E L A T I O N S								
(+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.04	0.15	0.15	0.00	0.00	0.00
DAYS TO FLOWER	0.00	0.00	-0.03	0.47++	-0.37++	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	0.10	0.16	0.05	0.00	0.00	0.00
NODULE NUMBER 1	0.00	0.00	-0.15	0.37++	-0.39++	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	-0.07	0.24	-0.06	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.05	0.13	-0.18	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.01	0.10	-0.11	0.00	0.00	0.00
PLANT HEIGHT	0.00	0.00	-0.04	0.34++	-0.41++	0.00	0.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.00	0.00	-0.11	-0.11	0.03	0.00	0.00	0.00
100 SEED WEIGHT	0.00	0.00	-0.11	1.00	-0.52++	0.00	0.00	0.00
QUALITY OF SEED	0.00	0.00	0.03	-0.52++	1.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
1.00								

TABLE 158 EXPERIMENT 655 YEAR 1975

REGION - ASIA  
 SITE - THIRUNELVELY  
 LATITUDE - 9 DEG. 6 MIN. N  
 COUNTRY - SRI LANKA  
 ELEVATION - 1 M  
 LONGITUDE - 80 DEG. 2 MIN. E  
 COOPERATOR - J.S. SILVATNAM  
 DATE PLANTED - FEBRUARY 3, 1976  
 DATE HARVESTED - JUNE, 1976  
 SCIL TYPE - SANDY LOAM  
 FERTILIZER USED (KG/HA) - N 22.0, P 29.0, K 36.5  
 AMOUNT OF MOISTURE - 102 MM  
 NUMBER OF IRRIGATIONS - 22  
 SUBSTITUTE VARIETIES - BFAGG, HALL  
 LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
12	PB-1	3771.59	33.00	85.00	45.25	254.75	0.43	2.27	69.25	1.00
3	HARDEE	3681.99	33.00	105.00	27.25	104.25	0.22	1.02	50.50	1.00
7	DAVIS	3563.21	33.00	83.00	25.75	63.00	0.19	0.72	49.00	1.00
6	BAGG	3542.37	30.00	85.00	28.75	55.50	0.19	0.65	47.50	1.00
10	CLARK 63	3261.77	36.79	84.77	51.75	91.50	0.39	1.30	73.25	2.00
2	HAMPTON 266A	3094.37	30.00	89.00	80.25	107.25	0.49	0.83	46.00	1.00
8	FOREST	3073.53	33.00	85.00	36.25	59.25	0.20	0.74	44.25	1.00
11	WILLIAMS	2771.39	33.00	85.00	55.00	91.25	0.39	0.92	66.50	1.00
5	HILL	2083.75	33.00	86.00	27.75	56.50	0.16	0.68	42.50	1.00
5	BOSSIER	1875.37	36.70	105.00	57.25	159.00	0.49	1.82	69.25	1.00
13	S.J.2	1708.67	36.00	105.00	24.50	62.00	0.17	1.00	73.00	1.00
4	IMPROVED PELICAN	1562.81	36.00	105.00	21.75	64.25	0.19	0.77	72.00	1.00
1	JUPITER	785.57	47.00	117.00	27.75	38.00	0.35	0.35	64.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
CORRELATIONS										
YIELD KG/HA										
DAYS TO FLOWER										
DAYS TO MATURITY										
NODULE NUMBER 1										
NODULE NUMBER 2										
NODULE WEIGHT 1										
NODULE WEIGHT 2										
PLANT HEIGHT										
LOGGING										
SHATTER										
HARVEST										
PODS PER PLANT										
100 SEED WEIGHT										
QUALITY OF SEED										

TABLE 138 EXPERIMENT 655 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
12	PE-1	1.00	295.50	35.00	16.03	1.00
3	HARDEE	1.00	270.75	24.25	19.75	1.00
7	DAVIS	1.00	289.25	27.25	16.85	1.00
6	BPAGG	1.00	282.75	20.25	19.50	1.00
10	CLARK 63	2.00	283.50	34.75	18.20	1.00
2	HAMPTON 266A	1.00	296.75	27.25	23.68	1.00
8	FORREST	1.00	257.00	28.75	15.73	1.00
11	WILLIAMS	1.00	264.50	25.50	20.98	1.00
5	HILL	1.00	222.25	33.50	18.60	1.00
5	BOSSIER	1.00	284.00	29.50	18.83	2.00
13	S.J.2	1.00	273.75	25.75	15.95	2.00
4	IMPROVED PELICAN	1.00	250.50	35.50	16.30	2.00
1	JUPITER	1.00	248.25	30.75	20.20	4.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.08	272.21	29.08	18.51	1.46
COEFFICIENT OF VARIATION		0.00	11.38	3.58	0.18	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	8.36%	24.61%	1.98%	0.00%
		0.00	32.64	*****	0.52	0.00
C C R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	0.18	0.43**	-0.10	0.03	-0.73**
DAYS TO FLOWER		0.10	-0.27	0.21	-0.07	0.93**
DAYS TO MATURITY		-0.25	-0.22	0.02	0.04	0.84**
NCDULE NUMBER 1		0.17	0.39**	-0.01	0.47**	-0.21
NCDULE NUMBER 2		-0.00	0.25	0.26	-0.04	-0.22
NCDULE WEIGHT 1		0.15	0.22	0.11	0.35+	0.06
NCDULE WEIGHT 2		0.13	0.22	0.18	-0.17	-0.20
PLANT HEIGHT		0.31+	0.14	0.14	-0.24	0.37**
LOGGING		1.00**	0.11	0.22	-0.04	-0.16
SHATTER		1.00	0.11	0.22	-0.04	-0.16
PLANTS HARVEST		0.11	1.00	-0.13	0.12	-0.25
PODS PER PLANT		0.22	-0.13	1.00	-0.22	0.10
100 SEED WEIGHT		-0.04	0.12	-0.22	1.00	0.03
QUALITY OF SEED		-0.16	-0.25	0.10	0.03	1.00

TABLE 139

EXPERIMENT 324

YEAR 1975

REGION - ASIA  
 SITE - SHANHUA  
 LATITUDE - 22 DEG. 30 MIN. N  
 COOPERATOR - S. SHANMUGASUNDARAM  
 DATE PLANTED - JULY 21, 1975  
 SOIL TYPE - SAND  
 FERTILIZER USED (KG/HA) - N 15.0, P 100.0, K 150.0  
 AMOUNT OF MOISTURE - 1113 MM  
 NUMBER OF IRRIGATIONS - 1  
 LOCAL VARIETY - 2120

COUNTRY - TAIWAN  
 ELEVATION - 9 M  
 LONGITUDE - 120 DEG. 17 MIN. E  
 DATE HARVESTED - OCTOBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	2120	1975.81	44.75	109.00	0.00	0.00	0.00	0.00	88.00	2.00
10	COLUMBUS	1382.07	34.00	95.25	0.00	0.00	0.00	0.00	38.00	1.00
5	COBB	1333.22	36.00	96.00	0.00	0.00	0.00	0.00	29.25	1.00
13	WILLIAMS	1292.47	31.50	92.00	0.00	0.00	0.00	0.00	38.50	1.00
6	BOSSIER	1279.01	46.75	102.50	0.00	0.00	0.00	0.00	43.00	1.50
3	HARDEE	1256.00	46.75	105.75	0.00	0.00	0.00	0.00	33.50	1.00
11	CLARK 63	1187.15	32.00	95.25	0.00	0.00	0.00	0.00	37.50	1.00
7	DAVIS	1177.03	41.25	96.50	0.00	0.00	0.00	0.00	32.75	1.00
8	TRACY	1121.81	35.00	97.00	0.00	0.00	0.00	0.00	32.50	1.00
12	WOODWORTH	1057.46	30.75	88.75	0.00	0.00	0.00	0.00	36.50	1.75
9	PORREST	959.82	38.50	95.75	0.00	0.00	0.00	0.00	33.25	1.00
14	CALLAND	918.64	29.50	89.00	0.00	0.00	0.00	0.00	38.50	1.00
4	IMPROVED PELICAN	873.55	47.75	102.25	0.00	0.00	0.00	0.00	64.00	1.00
2	HAMETCN 266A	838.29	40.50	95.00	0.00	0.00	0.00	0.00	33.00	1.00
1	JUPITER	474.93	49.00	110.25	0.00	0.00	0.00	0.00	61.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1128.48	38.93	98.02	0.00	0.00	0.00	0.00	42.62	1.15
COEFFICIENT OF VARIATION		69.44	0.60	0.36	0.00	0.00	0.00	0.00	1.23	0.10
5% LSD VARIETY MEANS (*****=NS)		12.31%	3.10%	0.72%	0.00%	0.00%	0.00%	0.00%	5.75%	16.79%
		198.48	1.72	1.02	0.00	0.00	0.00	0.00	3.50	0.28
CORRELATIONS (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.09	0.11	0.00	0.00	0.00	0.00	0.28+	0.48
DAYS TO FLOWER		-0.09	1.00	0.88++	0.00	0.00	0.00	0.00	0.51++	0.10
DAYS TO MATURITY		0.11	0.88++	1.00	0.00	0.00	0.00	0.00	0.66++	0.18
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.28+	0.51++	0.66++	0.00	0.00	0.00	0.00	1.00	0.50
LCDGING		0.48++	0.10	0.18	0.00	0.00	0.00	0.00	0.50++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.05	-0.08	-0.27+	0.00	0.00	0.00	0.00	-0.18	-0.09
PODS PER PLANT		0.65++	0.35++	0.54++	0.00	0.00	0.00	0.00	0.76++	0.59
100 SEED WEIGHT		-0.07	-0.76++	-0.69++	0.00	0.00	0.00	0.00	-0.61++	-0.33
QUALITY OF SEED		-0.64++	0.00	-0.00	0.00	0.00	0.00	0.00	0.01	-0.19
DISEASE I		-0.06	-0.26+	-0.18	0.00	0.00	0.00	0.00	0.06	0.05
DISEASE II		-0.19	0.18	0.10	0.00	0.00	0.00	0.00	0.17	-0.15
DISEASE III		0.06	0.12	0.06	0.00	0.00	0.00	0.00	-0.15	-0.21

TABLE 139 EXPERIMENT 324 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CRCS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
15	2120	1.00	149.50	97.40	6.53	1.50
10	COLUMBUS	1.00	161.50	28.78	13.25	1.50
5	COBB	1.00	179.00	29.08	12.25	2.00
13	WILLIAMS	1.00	158.50	26.52	15.25	2.00
6	BOSSIER	1.00	160.75	30.58	9.25	2.00
3	HARDEE	1.00	147.50	34.78	11.25	2.25
11	CLARK 63	1.00	125.00	27.45	13.75	2.50
7	DAVIS	1.00	164.00	30.60	11.75	1.75
8	TRACY	1.00	158.00	25.65	15.25	2.25
12	WOODWORTH	1.00	157.25	23.53	14.00	3.50
9	FORREST	1.00	154.00	30.97	9.00	2.00
14	CALLAND	1.00	170.50	20.95	14.75	3.75
4	IMPROVED PELICAN	1.00	164.50	31.37	9.25	2.00
2	HAMPTON 266A	1.00	165.50	30.00	10.00	3.25
1	JUPITER	1.00	140.50	26.80	9.75	5.00
GRAND MEAN						
1.00 157.07 32.96 11.69 2.48						
STANDARD ERROR OF A VARIETY MEAN						
0.00 6.81 1.65 0.41 0.30						
COEFFICIENT OF VARIATION						
0.00% 8.68% 10.03% 24.41%						
5% LSD VARIETY MEANS (*****=NS)						
0.00 19.47 4.72 1.16 0.87						
C O R R E L A T I O N S						
(+ - PROB=-.05 ++ - PROB=-.01)						
YIELD	KG/HA	0.00	0.05	0.65++	-0.07	-0.64++
DAYS TO	FLCHER	0.00	-0.08	0.35++	-0.76++	0.00
DAYS TO	MATURITY	0.00	-0.27+	0.54++	-0.69++	-0.26+
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
LODGING	HEIGHT	0.00	-0.18	0.76++	-0.61++	0.01
SHATTER	HARVEST	1.00	0.00	0.59++	-0.33++	-0.19
PLANTS	PER PLANT	0.00	1.00	0.00	0.00	0.00
PODS PER	100 SEED	0.00	-0.13	-0.13	0.07	-0.12
WEIGHT	OF SEED	0.00	-0.13	1.00	-0.60++	-0.30+
QUALITY	DISEASE I	0.00	0.07	-0.60++	1.00	0.12
DISEASE	II	0.00	-0.12	-0.30+	0.12	1.00
DISEASE	III	0.00	-0.05	0.01	-0.06	0.06
DISEASE	III	0.00	0.16	-0.10	-0.05	1.00
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.16	-0.16
DISEASE	III	0.00	-0.00	-0.20	0.1	



TABLE 140

EXPERIMENT 446

YEAR 1975

REGION - ASIA  
 SITE - KHON KAEN  
 LATITUDE - 16 DEG. N  
 COOPERATOR - T. CHAROENWATANA  
 DATE PLANTED - AUGUST 8, 1975  
 SOIL TYPE - SAND 80%, SILT 12%, CLAY 8%, PH 6.0  
 FERTILIZER USED (KG/HA) - N 18.7, P 32.2, K 62.2  
 AMOUNT OF MOISTURE - 547 MM  
 LOCAL VARIETY - S.J.2

COUNTRY - THAILAND  
 ELEVATION - 185 M  
 LONGITUDE - 100 DEG. E

DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	1029.79	39.00	94.25	61.50	255.00	0.47	5.48	28.25	0.00
2	HAMPTON 266A	999.37	33.00	91.00	143.50	316.50	0.58	3.64	22.25	0.00
4	IMPROVED PELICAN	910.60	39.00	92.50	115.75	302.25	0.34	4.06	35.00	0.00
6	BOSSIER	866.84	28.25	90.00	124.50	354.25	0.58	4.78	21.50	0.00
7	DAVIS	811.00	34.50	94.25	93.00	278.75	0.59	4.51	26.50	0.00
8	TRACY	768.90	28.25	85.25	71.25	252.75	0.76	3.63	25.50	0.00
5	COBB	752.65	29.25	84.00	123.25	242.75	0.82	3.45	21.75	0.00
1	JUPITER	706.81	39.00	98.00	62.50	235.00	0.27	4.08	37.25	0.00
13	WILLIAMS	644.30	30.00	92.50	79.75	259.25	0.39	3.26	25.25	0.00
10	COLUMBUS	614.71	31.25	94.00	72.00	227.50	0.29	3.31	25.00	0.00
14	CALLAND	594.29	28.00	91.50	63.50	225.50	0.41	3.84	29.25	0.00
9	FORREST	587.62	30.50	87.75	85.75	236.75	0.37	2.75	26.00	0.00
11	CLARK 63	550.53	28.75	90.50	122.00	195.75	0.28	2.84	24.00	0.00
12	WOODWORTH	522.19	28.25	84.00	88.25	211.00	0.45	2.93	23.75	0.00
15	S.J.2	462.18	39.00	94.00	26.25	143.75	0.28	2.84	29.00	0.00
	GRAND MEAN	721.45	32.40	90.90	88.85	249.12	0.46	3.69	26.68	0.00
	STANDARD ERROR OF A VARIETY MEAN	87.16	1.04	1.48	25.84	31.27	0.15	0.41	1.27	0.00
	COEFFICIENT OF VARIATION	24.16%	6.42%	3.27%	58.17%	25.10%	64.92%	22.16%	9.49%	0.00%
	5% ISD VARIETY MEANS (*****=NS)	248.75	2.97	4.24	*****	89.24	*****	1.17	3.61	0.00

(+ - PROB=.05      +- - PROB=.01)

YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1.00	0.24	0.26+	0.20	0.55+	0.20	0.66+	0.17	0.00
0.24	1.00	0.56+	-0.13	0.06	-0.15	0.29+	0.59+	0.00
0.26+	0.56+	1.00	-0.27+	0.08	-0.35+	0.31+	0.49+	0.00
0.20	-0.13	-0.27+	1.00	0.57+	0.58+	0.18	-0.13	0.00
0.55+	0.06	0.08	0.57+	1.00	0.35+	0.63+	0.02	0.00
0.20	-0.15	-0.35+	0.58+	0.35+	1.00	0.32+	-0.16	0.00
0.66+	0.29+	0.31+	0.18	0.63+	0.32+	1.00	0.23	0.00
0.17	0.59+	0.49+	-0.13	0.02	-0.16	0.23	1.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.42+	-0.10	-0.15	0.24	0.35+	0.29+	0.21	0.05	0.00
0.72+	0.61+	0.47+	0.06	0.34+	-0.10	0.49+	0.39+	0.00
-0.06	-0.58+	-0.28+	0.08	0.08	0.33+	0.03	-0.31+	0.00
-0.28+	-0.46+	-0.31+	-0.06	-0.11	-0.09	-0.25	-0.26+	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C O R R E L A T I O N S

PLANTS	PODS PER 100 SEED	QUALITY OF SEED	DISEASE I	DISEASE II	DISEASE III
YIELD	0.24	0.26+	0.20	0.55+	0.20
DAYS TO FLOWER	1.00	0.56+	-0.13	0.06	-0.15
DAYS TO MATURITY	0.26+	1.00	-0.27+	0.08	-0.35+
NODULE NUMBER 1	0.20	-0.13	1.00	0.57+	0.58+
NODULE NUMBER 2	0.55+	0.06	0.57+	1.00	0.35+
NODULE WEIGHT 1	0.20	-0.15	0.58+	0.35+	1.00
NODULE WEIGHT 2	0.66+	0.29+	0.18	0.63+	0.32+
PLANT HEIGHT	0.17	0.59+	-0.13	0.02	-0.16
LODGING	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00
HARVEST	0.42+	-0.10	0.24	0.35+	0.29+
PLANT	0.72+	0.61+	0.06	0.34+	-0.10
100 SEED WEIGHT	-0.06	-0.58+	0.08	0.08	0.33+
QUALITY OF SEED	-0.28+	-0.46+	-0.31+	-0.11	-0.09
DISEASE I	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00

TABLE 140

EXPERIMENT 446

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SPD WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEF	0.00	126.25	29.50	10.88	2.00	39.2	24.9
2	HAMPTON 266A	0.00	131.50	24.90	13.53	3.00	41.1	25.1
4	IMPROVED PELICAN	0.00	132.25	26.85	10.05	1.50	41.1	23.8
6	ROSSIFR	0.00	128.00	18.93	13.63	2.50	42.5	22.9
7	DAVIS	0.00	140.50	16.88	13.50	2.75	35.2	24.5
8	TRACY	0.00	129.50	14.18	15.93	3.50	39.0	25.7
5	CORE	0.00	143.50	14.10	13.48	2.25	39.2	25.9
1	JUPITER	0.00	136.25	21.60	12.08	2.75	40.4	25.6
13	WILLIAMS	0.00	128.00	11.75	13.83	2.75	39.6	25.1
10	COLUMBUS	0.00	122.00	15.78	13.93	3.00	38.9	26.4
14	CALLAND	0.00	125.25	11.53	15.90	4.00	35.6	26.8
9	FORREST	0.00	131.75	15.50	11.35	4.00	41.6	22.5
11	CLARK 63	0.00	111.50	13.48	14.00	2.50	39.1	24.8
12	WOODWORTH	0.00	125.50	11.25	14.00	3.75	43.9	23.7
15	S.J.2	0.00	85.75	17.10	11.58	1.00	42.1	20.9
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISD VARIETY MEANS (*****=NS)								
		0.00	5.34	1.71	0.59	0.40		
		0.00	8.44%	19.46%	8.90%	29.03%		
		0.00	15.23	4.87	1.67	1.14		
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.42++	0.72++	-0.06	-0.28+	0.00	0.00
DAYS TO	FLOWER	0.00	-0.10	0.61++	-0.58++	-0.46++	0.00	0.00
DAYS TO	MATURITY	0.00	-0.15	0.47++	-0.28+	-0.31+	0.00	0.00
NODULE	NUMBER 1	0.00	0.24	0.06	0.08	-0.06	0.00	0.00
NODULE	NUMBER 2	0.00	0.35++	0.34++	0.08	-0.11	0.00	0.00
NODULE	WEIGHT 1	0.00	0.29+	-0.10	0.33+	-0.09	0.00	0.00
NODULE	WEIGHT 2	0.00	0.21	0.49++	0.03	-0.25	0.00	0.00
PLANT	HEIGHT	0.00	0.05	0.39++	-0.31+	-0.26+	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.10	0.09	0.19	0.00	0.00
PODS PER	PLANT	0.00	0.10	1.00	-0.47++	-0.44++	0.00	0.00
100 SEED	WEIGHT	0.00	0.09	-0.47++	1.00	0.24	0.00	0.00
QUALITY	OF SEED	0.00	0.19	-0.44++	0.24	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 141 EXPERIMENT 347 YEAR 1975

REGION - ASIA  
 SITE - SURAT THANI  
 LATITUDE - 9 DEG. 7 MIN. N  
 COOPERATORS - J.K. TEMPLETON, W. BURANATHAM, P. JEWTRAKOOL, P. WONGSUKON  
 DATE PLANTED - JUNE 4, 1975  
 SOIL TYPE - SAND 82%, SILT 11%, CLAY 6%, PH 4.9  
 AMOUNT OF MOISTURE - APPROXIMATELY 650 MM  
 LOCAL VARIETIES - S.J.1, S.J.2

COUNTRY - THAILAND

ELEVATION - 10 M

LONGITUDE - 99 DEG. 18 MIN. E

DATE HARVESTED - SEPTEMBER, 1975

DATE PLANTED - JUNE 4, 1975

DATE HARVESTED - SEPTEMBER, 1975

DATE PLANTED - JUNE 4, 1975

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	1337.77	34.00	111.00	59.50	67.50	0.16	0.58	27.53	1.00
2	HAMPTON 266A	1162.73	35.75	98.50	48.50	60.50	0.16	0.44	20.00	1.00
5	COBB	1158.56	34.75	99.00	59.50	67.50	0.16	0.58	18.75	1.00
1	JUPITER	1154.40	43.50	118.50	47.75	29.75	0.09	0.24	51.05	1.00
9	FORREST	1066.88	33.75	97.50	31.50	71.25	0.07	0.35	25.30	1.00
7	DAVIS	1054.38	34.75	100.00	26.50	59.25	0.13	0.45	21.60	1.00
4	IMPROVED PELICAN	886.84	35.25	99.75	34.50	59.75	0.11	0.32	46.65	1.00
6	BOSSIER	779.32	33.25	100.00	58.00	67.00	0.16	0.38	17.90	1.00
8	TRACY	745.98	32.00	98.00	60.50	57.50	0.13	0.36	19.35	1.00
12	WOODWORTH	737.65	33.00	89.00	43.25	17.00	0.09	0.13	24.13	1.00
14	S.J.1	700.14	34.00	104.00	21.75	40.00	0.05	0.25	46.83	1.00
11	CLARK 63	662.63	29.75	90.50	25.25	21.75	0.03	0.11	20.95	1.00
13	WILLIAMS	625.12	31.50	95.00	43.50	35.00	0.09	0.28	21.25	1.00
15	S.J.2	608.45	37.50	112.75	36.00	43.75	0.07	0.36	42.35	1.00
10	COLUMBUS	545.94	31.50	98.25	24.00	28.75	0.04	0.17	22.18	1.00
GRAND MEAN		881.79	34.28	100.78	41.33	48.42	0.10	0.33	28.39	1.00
STANDARD ERROR OF A VARIETY MEAN		184.18	0.76	2.77	7.97	14.44	0.04	0.09	2.28	0.00
COEFFICIENT OF VARIATION		41.77%	4.41%	5.49%	38.55%	59.64%	68.31%	55.00%	16.03%	0.00%
5% LSD VARIETY MEANS (*****=NS)		*****	2.16	7.91	22.77	*****	*****	0.26	6.50	0.00

(+ - PROB=.05 \*\* - PROB=.01)

C O R R E L A T I O N S

YIELD	KG/HA	1.00	0.24	0.03	0.21	0.57++	0.45++	0.68++	0.22	0.00
DAYS TO FLOWER	0.24	1.00	0.62++	0.05	0.05	0.00	0.04	0.03	0.54++	0.00
DAYS TO MATURITY	0.03	0.62++	1.00	0.14	0.02	0.02	0.12	0.12	0.50++	0.00
NODULE NUMBER 1	0.21	0.05	0.14	1.00	0.30+	0.30+	0.65++	0.41++	-0.17	0.00
NODULE NUMBER 2	0.57++	0.00	0.02	0.30+	1.00	1.00	0.40++	0.79++	0.04	0.00
NODULE WEIGHT 1	0.45++	0.04	0.12	0.65++	0.40++	0.40++	1.00	0.63++	-0.10	0.00
NODULE WEIGHT 2	0.68++	0.03	0.12	0.41++	0.79++	0.79++	0.63++	1.00	0.04	0.00
PLANT HEIGHT	0.22	0.54++	0.50++	-0.17	0.04	0.04	-0.10	0.04	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.57++	0.27+	0.12	0.20	0.35++	0.35++	0.27+	0.38++	0.30+	0.00
PODS PER PLANT	0.46++	0.07	0.15	0.06	0.41++	0.41++	0.29+	0.34++	0.29+	0.00
100 SEED WEIGHT	0.06	-0.15	-0.19	0.11	-0.17	-0.17	-0.03	-0.03	-0.46++	0.00
QUALITY OF SEED	-0.34++	0.04	0.43++	-0.19	-0.28++	-0.28++	-0.16	-0.18	0.13	0.00
DISEASE I	-0.49++	-0.02	-0.03	-0.06	-0.34++	-0.34++	-0.11	-0.38++	-0.08	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 141 EXPERIMENT 347 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEE	1.00	160.25	15.85	16.03	3.00	38.4	27.9
2	HAMPTON 266A	1.00	193.25	14.30	19.33	3.00	42.6	26.0
5	COBB	1.00	177.50	10.78	17.93	3.25	43.6	24.8
1	JUPIER	1.00	191.25	10.88	18.68	4.00	44.4	24.6
9	FORREST	1.00	175.50	14.00	14.53	3.50	40.1	25.7
7	DAVIS	1.00	170.25	11.08	19.33	3.00	43.7	23.7
4	IMPROVED PELICAN	1.00	180.75	18.03	10.83	3.00	44.2	24.1
6	BOSSIER	1.00	156.00	12.63	15.83	3.50	44.6	24.3
8	TRACY	1.00	173.00	11.58	18.83	3.75	43.6	23.3
12	WOODWORTH	1.00	133.50	7.82	18.78	2.25	42.0	25.2
14	S.J. 1	1.00	171.75	10.40	15.68	4.00	45.0	20.2
11	CLARK 63	1.00	147.25	10.25	17.85	3.25	41.5	25.7
13	WILLIAMS	1.00	147.00	7.70	20.38	3.25	44.6	24.5
15	S.J. 2	1.00	167.00	13.80	13.18	3.50	43.4	22.7
10	COLUMBUS	1.00	143.00	11.43	17.83	3.75	44.5	24.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	165.82	12.03	17.00	3.33		
COEFFICIENT OF VARIATION		0.00	14.75	1.76	0.57	0.31		
5% LSD VARIETY MEANS (*****=NS)		0.00	17.80%	29.26%	6.71%	18.38%		
		0.00	*****	5.03	1.63	0.88		
C O R R E L A T I O N S								
					(+ - PROB=.05	++ - PROB=.01)		
YIELD	KG/HA	0.00	0.57++	0.46++	0.06	-0.34++	-0.49++	0.00
DAYS TO FLOWER		0.00	0.27+	0.07	-0.15	0.04	-0.02	0.00
DAYS TO MATURITY		0.00	0.12	0.15	-0.19	0.43++	-0.03	0.00
NODULE NUMBER 1		0.00	0.20	0.06	0.11	-0.19	-0.06	0.00
NODULE NUMBER 2		0.00	0.35++	0.41++	-0.17	-0.28+	-0.34++	0.00
NODULE WEIGHT 1		0.00	0.27+	0.29+	0.12	-0.16	-0.11	0.00
NODULE WEIGHT 2		0.00	0.38++	0.34++	-0.03	-0.18	-0.38++	0.00
PLANT HEIGHT		0.00	0.30+	0.29+	-0.46++	0.13	-0.08	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.41++	-0.07	-0.01	-0.42++	0.00
PLANT		0.00	0.41++	1.00	-0.41++	0.00	-0.18	0.00
100 SEED WEIGHT		0.00	-0.07	-0.07	1.00	0.07	-0.23	0.00
QUALITY OF SEED		0.00	-0.01	0.00	0.07	1.00	-0.07	0.00
DISEASE I		0.00	-0.42++	-0.18	-0.23	-0.07	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 142 EXPERIMENT 669 YEAR 1975

REGION - ASIA  
 SITE - SUWAN FARM  
 LATITUDE - 15 DEG. N  
 COOPERATORS - P. YINGCHOL, P. SRINIVES, A. KAMNALRUT  
 DATE PLANTED - JANUARY 6, 1976  
 SCIL TYPE - SILT  
 FERTILIZER USED (KG/HA) - N 160.0, P 200.0  
 AMOUNT OF MOISTURE - 110 MM  
 NUMBER OF IRRIGATIONS - 16  
 LOCAL VARIETIES - S.J.1, S.J.2, WAKAJIMA  
 SUBSTITUTE VARIETIES - PICKETT 71, BCNU5

COUNTRY - THAILAND  
 ELEVATION - 300 M  
 DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TC FLOWER	DAYS TC MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PIANT HEIGHT	LOGGING
9	FORREST	2183.17	44.00	102.75	7.25	16.75	0.03	0.21	0.21	54.75	1.25
10	COLUMBUS	2097.00	37.00	101.00	42.00	171.25	0.21	1.28	1.28	54.00	1.25
17	DAVIS	2030.66	45.75	108.00	5.75	18.25	0.03	0.29	0.29	45.00	1.00
3	HARDEE	1973.00	42.25	104.50	21.50	29.00	0.09	0.56	0.56	35.00	1.00
15	S.J.2	1928.00	49.25	106.25	10.75	12.50	0.05	0.17	0.17	71.25	2.25
16	IMPROVED PFLICAN	1908.67	49.25	101.00	2.75	3.50	0.02	0.06	0.06	73.00	1.00
7	BCNU5	1878.33	38.75	101.00	23.75	35.50	0.13	0.50	0.50	47.00	1.00
4	PICKETT 71	1855.67	44.00	104.50	21.75	31.50	0.11	0.58	0.58	43.75	1.50
2	HAMPTON 266A	1750.33	44.00	102.75	29.00	38.50	0.11	0.47	0.47	31.75	1.25
13	WILLIAMS	1720.45	37.50	101.00	57.00	56.00	0.17	0.75	0.75	39.50	1.25
12	CALLAND	1661.33	37.00	101.00	11.50	28.25	0.07	0.43	0.43	47.50	1.00
6	BOSSIER	1638.33	44.00	101.00	29.75	30.50	0.16	0.58	0.58	34.75	1.00
16	WAKAJIMA	1628.33	44.00	101.00	25.50	29.75	0.11	0.58	0.58	47.50	1.25
14	S.J.1	1562.00	47.50	101.00	36.25	38.00	0.27	0.51	0.51	71.50	1.25
8	TRACY	1490.00	44.00	101.00	45.75	66.50	0.20	0.89	0.89	30.25	1.50
1	JUPIFER	1216.33	51.00	113.00	9.00	10.50	0.04	0.17	0.17	65.00	2.75
11	CIARK 63	1059.67	42.25	108.00	0.00	0.00	0.00	0.00	0.00	38.25	1.25
5	COBB	372.00	44.00	106.25	0.00	0.00	0.00	0.00	0.00	27.00	1.00
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% ISI VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
(+ - PROB=0.05 ** - PROB=0.01)											
YIELD	KG/HA	1.00	-0.13	-0.25+	0.09	0.16	0.11	0.20	0.06	0.32++	0.06
DAYS TO FLOWER	1.00	-0.13	1.00	0.37++	-0.31++	-0.40++	-0.12	-0.40++	0.41++	0.41++	0.41++
DAYS TO MATURITY	1.00	-0.25+	0.37++	1.00	-0.53++	-0.45++	-0.42++	-0.48++	0.02	0.40++	0.40++
NODULE NUMBER 1	0.09	-0.31++	-0.50++	1.00	0.84++	0.84++	0.83++	0.79++	-0.11	-0.02	-0.02
NODULE NUMBER 2	0.16	-0.40++	-0.45++	0.84++	1.00	0.72++	0.72++	0.94++	-0.06	-0.02	-0.02
NODULE WEIGHT 1	0.11	-0.12	-0.42++	0.83++	0.72++	0.72++	1.00	0.65++	0.06	-0.02	-0.02
NODULE WEIGHT 2	0.20	-0.40++	-0.48++	0.79++	0.94++	0.94++	0.65++	1.00	-0.08	-0.05	-0.05
PLANT HEIGHT	0.32++	0.41++	0.32	-0.11	-0.36	-0.36	0.06	-0.08	1.00	0.35++	0.35++
LOGGING	0.06	0.41++	0.40++	-0.02	-0.02	-0.02	-0.02	-0.05	0.01	0.01	0.01
SHATPR	-0.08	0.17	-0.19	0.10	0.23	0.23	0.31++	0.26++	0.51++	-0.31	-0.31
PLANTS	0.54++	0.11	-0.34++	0.25+	-0.42++	-0.40++	-0.34++	-0.40++	0.25+	0.25+	0.25+
PODS PER PLANT	-0.16	0.34++	0.41++	-0.42++	0.19	0.25+	0.05	0.27+	-0.68++	-0.39++	-0.39++
100 SEED WEIGHT	-0.09	-0.64++	-0.29+	0.17	0.17	0.18	0.08	0.19	-0.63++	-0.14	-0.14
QUALITY CF SEED	-0.10	-0.55++	-0.06	0.17	0.17	0.18	0.08	0.19	-0.63++	-0.14	-0.14



TABLE 142 EXPERIMENT 669 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.00	205.25	35.75	15.32	2.00	40.1	21.9
10	COLUMBUS	1.00	194.50	28.50	19.32	3.75	44.9	22.2
17	DAVIS	1.00	218.75	29.75	16.56	2.75	39.7	24.6
3	HARDEE	1.00	108.75	40.00	17.64	3.25	42.3	23.1
15	S.J.2	1.00	185.00	34.00	12.84	1.75	43.1	19.9
16	IMPROVED PELICAN	1.00	214.50	44.75	12.99	1.25	44.2	23.9
7	BONUS	1.00	174.50	26.75	18.80	4.25	43.4	21.8
4	PICKETT 71	1.00	223.50	18.00	18.28	3.50	39.3	23.8
2	HAMPTON 266A	1.00	150.25	24.00	21.43	4.00	41.2	19.4
13	WILLIAMS	1.00	148.25	28.25	19.37	3.75	40.6	25.5
6	CALLANE	1.00	159.75	25.75	21.18	4.75	43.1	23.8
12	FOSSIER	1.00	128.75	30.00	18.48	4.00	44.0	21.0
16	WAKAJIMA	3.00	195.00	36.25	18.65	3.00	37.9	23.7
14	S.J.1	2.50	277.25	34.00	13.84	1.75	46.3	17.6
8	TRACY	1.00	127.75	25.75	17.30	3.75	39.7	25.3
1	JUPIER	1.00	106.50	51.75	13.24	3.25	42.3	21.6
11	CLARK 63	1.25	36.75	61.25	16.80	4.00	41.5	23.9
5	COBB	1.00	16.75	36.75	20.51	3.50	42.1	24.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.08	0.54++	-0.16	-0.09	-0.10		
DAYS TC FLOWER		0.17	0.11	0.34++	-0.64++	-0.55++		
DAYS TC MATURITY		-0.19	-0.34++	0.41++	-0.29+	-0.06		
NODULE NUMBER 1		0.10	0.25+	-0.42++	0.19	0.17		
NODULE NUMBER 2		-0.02	0.24+	-0.40++	0.25+	0.18		
NODULE WEIGHT 1		0.23	0.31++	-0.34++	0.05	0.08		
NODULE WEIGHT 2		0.01	0.26+	-0.40++	0.27+	0.19		
PLANT HEIGHT		0.17	0.51++	0.25+	-0.68++	-0.60++		
LOGGING		0.01	-0.01	0.24+	-0.39++	-0.14		
SHATTER		1.00	0.29+	0.06	-0.12	-0.22		
PLANTS HARVEST		0.29+	1.00	-0.37++	-0.31++	-0.39++		
PODS PER PLANT		0.06	-0.37++	1.00	-0.31++	-0.23+		
100 SEED WEIGHT		-0.12	-0.31++	-0.31++	1.00	0.65++		
QUALITY OF SEED		-0.22	-0.39++	-0.23+	0.65++	1.00		

TABLE 143 EXPERIMENT 392 YEAR 1975

REGION - EUROPE COUNTRY - HUNGARY  
SITE - GODOLLO LONGITUDE - 19 DEG. E  
LATITUDE - 47 DEG. N  
COOPERATOR - A. BALINT DATE HARVESTED - SEPTEMBER, 1975  
SOIL PLANTED - MAY 27, 1975  
SOIL TYPE - BLACK EARTH CLAY  
FERTILIZER USED (KG/HA) - N 50.0, P 230.0, K 100.0  
AMOUNT OF MOISTURE - 300 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	HODGSON	2963.09	57.00	105.00	59.00	0.00	0.00	0.00	114.75	1.00
2	SWIFT	2950.59	46.00	98.00	47.25	0.00	0.00	0.00	136.50	2.25
1	ALTONA	2454.66	46.00	98.00	44.00	0.00	0.00	0.00	83.50	2.75
7	BEESON	2446.32	58.00	105.00	84.25	0.00	0.00	0.00	117.50	2.25
8	WELLS	2171.27	59.00	105.00	63.00	0.00	0.00	0.00	106.50	1.00
5	AMSOY 71	2012.90	62.00	118.00	82.25	0.00	0.00	0.00	126.00	1.75
3	HARK	1879.54	57.00	110.00	88.75	0.00	0.00	0.00	121.00	2.25
10	WOODNORTH	1842.03	63.00	120.00	72.00	0.00	0.00	0.00	114.25	2.00
6	CORSOY	1829.53	58.00	118.00	150.00	0.00	0.00	0.00	124.25	2.50
11	WILLIAMS	1717.01	63.00	120.00	124.25	0.00	0.00	0.00	121.50	1.25
13	BONUS	1250.25	71.00	140.00	75.50	0.00	0.00	0.00	120.25	1.75
12	CALLAND	1200.24	62.00	120.00	80.50	0.00	0.00	0.00	123.00	1.75
9	CLARK 63	1079.38	66.00	138.00	81.50	0.00	0.00	0.00	117.00	1.75
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R R E L A T I O N S										
(* - PROP=.05 ** - PROP=.01)										
YIELD	KG/HA	1.00	-0.75++	-0.85++	-0.32+	0.00	0.00	0.00	-0.07	0.05
DAYS TO FLOWER		-0.75++	1.00	0.89++	0.30+	0.00	0.00	0.00	0.23	-0.32+
DAYS TO MATURITY		-0.85++	0.89++	1.00	0.30+	0.00	0.00	0.00	0.24	-0.13
NODULE NUMBER 1		-0.32+	0.30+	0.30+	1.00	0.00	0.00	0.00	0.36++	0.03
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.07	0.23	0.24	0.36++	0.00	0.00	0.00	1.00	-0.11
LODGING		0.05	-0.32+	-0.13	0.03	0.00	0.00	0.00	-0.11	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS		0.03	0.06	-0.08	0.21	0.00	0.00	0.00	0.00	-0.12
PODS PER PLANT		0.51++	-0.33+	-0.33+	0.00	0.00	0.00	0.00	0.14	0.11
100 SEED WEIGHT		0.67++	-0.82++	-0.78++	-0.39++	0.00	0.00	0.00	-0.38++	0.25
QUALITY OF SEED		-0.19	0.27	0.18	0.21	0.00	0.00	0.00	0.29+	0.04
DISEASE I		0.41++	-0.49++	-0.40++	0.00	0.00	0.00	0.00	0.18	0.07
DISEASE II		-0.26	0.43++	0.22	0.27	0.00	0.00	0.00	0.03	-0.16
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 143 EXPERIMENT 392 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	FODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
4	HODGSON	1.00	154.75	52.75	18.58	1.00	40.5	21.1
2	SWIFT	1.00	140.75	45.85	19.78	2.00	39.6	19.7
1	ALTONA	1.00	148.25	36.43	23.90	1.00	43.1	18.4
7	BEESON	1.00	167.25	39.68	18.40	3.00	43.7	19.1
8	WELLS	1.00	159.00	34.43	16.05	4.00	44.5	17.9
5	AMSOY 71	1.00	146.50	39.73	17.13	5.00	43.9	17.4
3	HARK	1.00	152.75	37.30	18.70	4.00	45.6	17.5
10	WOODWORTH	1.00	147.25	44.70	14.65	1.00	41.7	18.7
6	CORSOY	1.00	169.50	45.68	15.60	4.00	44.1	17.3
11	WILLIAMS	1.00	162.50	30.40	15.73	1.00	40.9	19.6
13	BONUS	1.00	165.50	27.55	14.70	4.00	45.9	18.4
12	CALLAND	1.00	142.25	31.60	17.30	2.00	42.6	19.2
9	CLARK 63	1.00	125.50	37.43	12.83	2.00	42.5	18.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C C R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.03	0.51++	0.67++	-0.19	0.41++	-0.26
DAYS TO	FLCWR	0.00	0.06	-0.33+	-0.82++	0.27	-0.49++	0.43++
DAYS TO	MATURITY	0.00	-0.08	-0.33+	-0.78++	0.18	-0.40++	0.22
NODULE	NUMBER 1	0.00	0.21	-0.03	-0.39++	0.21	-0.23	0.27
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	-0.03	0.14	-0.38++	0.29+	0.18	0.03
LCDGING	HEIGHT	0.00	-0.12	0.11	0.25	0.04	0.07	-0.16
SHATTER	SHATTER	1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.23	-0.03	0.19	-0.01	0.23
FODS PER	PLANT	0.00	-0.23	1.00	0.19	-0.15	0.20	-0.31+
100 SEED	WEIGHT	0.00	-0.03	0.19	1.00	-0.20	0.41++	-0.38++
QUALITY	OF SEED	0.00	0.19	-0.15	-0.20	1.00	-0.06	0.16
DISEASE	I	0.00	-0.01	0.20	0.41++	-0.06	1.00	-0.47++
DISEASE	II	0.00	0.23	-0.31+	-0.38++	0.16	-0.47++	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00								

TABLE 144

EXPERIMENT 397

YEAR 1975

REGION - EUROPE  
 SITE - SASSAPI, SARDINIA  
 LATITUDE - 40 DEG. 43 MIN. N  
 COOPERATOR - G. RIVOIRA  
 DATE PLANTED - JUNE 6, 1975  
 SOIL TYPE - SAND 55.4%, SILT 19.6%, CLAY 25.0%, PH 7.9  
 FERTILIZER USED (KG/HA) - P 95.9  
 AMOUNT OF MOISTURE - 546 MM  
 NUMBER OF IRRIGATIONS - 9

COUNTRY - ITALY  
 ELEVATION - 80 M  
 LONGITUDE - 8 DEG. 33 MIN. E

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	AMSOY 71	4734.28	46.50	144.00	81.00	174.25	0.57	1.96	114.25	3.00
3	HARK	4438.39	45.50	145.00	146.50	248.25	1.08	3.67	107.25	3.00
4	HODGSON	4382.13	45.50	124.00	118.00	248.75	1.12	3.74	102.00	2.75
8	WELLS	4346.70	47.00	144.00	119.50	235.75	1.51	4.34	107.75	2.50
7	BEESON	4272.10	49.00	144.00	142.50	178.75	2.17	4.39	109.25	2.75
12	WILLIAMS	4260.44	55.00	137.00	172.50	234.25	1.72	3.41	113.50	2.50
11	WOODWORTH	4106.65	55.00	124.00	163.50	199.00	1.66	3.58	109.25	2.75
6	CORSOY	4047.48	49.75	139.00	164.00	273.75	1.36	3.93	103.00	2.50
10	CLARR 63	4000.80	57.00	139.00	187.50	215.50	2.03	4.20	120.50	2.50
14	BONUS	3944.54	57.00	145.00	236.50	305.50	2.75	3.89	128.75	1.50
13	CALLAND	3940.79	56.00	152.00	98.00	172.25	1.23	3.35	117.25	1.75
2	SWIFT	3160.63	47.50	104.00	134.00	202.25	1.50	4.01	101.25	4.75
1	ALTONA	2995.60	45.00	89.00	82.75	160.25	1.41	4.07	82.50	1.00
9	COLUMBUS	2542.17	63.00	159.00	285.25	281.25	2.18	5.51	118.00	4.00
GRAND MEAN										
3940.91										
STANDARD ERROR OF A VARIETY MEAN										
161.50										
COEFFICIENT OF VARIATION										
8.20%										
5% LSD VARIETY MEANS (*****=NS)										
461.59										
C O R R E L A T I O N S										
(+ - PROB=-.05      +- - PROB=-.01)										
YIELD	KG/HA	1.00	-0.30+	0.28+	-0.33+	-0.09	-0.27+	-0.39+	0.13	-0.25
DAYS TO FLOWER	1.00	0.48++	0.55++	0.20	0.39++	0.20	0.39++	0.20	0.52++	-0.06
DAYS TO MATURITY	0.28+	1.00	0.33+	0.23	0.11	0.60++	0.77++	0.41++	0.64++	0.07
NODULE NUMBER 1	-0.33+	0.33+	1.00	0.60++	0.77++	1.00	0.44++	0.63++	0.37++	0.26+
NODULE NUMBER 2	-0.09	0.20	0.60++	0.23	0.60++	1.00	0.44++	0.63++	0.31+	0.13
NODULE WEIGHT 1	-0.27+	0.39++	0.11	0.77++	0.44++	1.00	0.50++	1.00	0.26	0.03
NODULE WEIGHT 2	-0.39++	0.20	0.01	0.41++	0.63++	0.50++	0.26	1.00	0.15	0.14
PLANT	HEIGHT	0.13	0.52++	0.64++	0.37++	0.31+	0.26	0.15	1.00	0.25
LODGING	SHATTER	-0.25	-0.06	0.07	0.26+	0.13	0.03	0.14	0.25	1.00
PLANTS	HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.25	-0.04	0.23	0.03	0.11	0.03	-0.15	0.22	-0.06
100 SEED	WEIGHT	0.26	0.40++	0.51++	0.20	0.24	0.00	-0.01	0.45++	-0.15
QUALITY	OF SEED	0.55++	0.02	0.51++	-0.03	-0.09	0.07	-0.14	0.31+	-0.12
DISEASE	I	-0.25	0.27+	-0.14	0.11	0.02	0.24	0.28+	0.06	0.03
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 144 EXPERIMENT 397 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	AMSOY 71	1.00	200.50	41.82	22.74	1.50
3	HARK	1.00	212.25	46.20	21.01	1.50
4	HODGSON	1.00	173.00	46.07	17.94	1.25
8	WELLS	1.00	208.50	37.92	20.73	1.00
7	BEPSON	1.00	206.00	39.35	24.35	2.75
12	WILLIAMS	1.00	220.25	39.92	22.47	1.50
11	WOODWORTH	1.00	187.25	44.00	19.44	2.25
6	CORSOY	1.00	212.75	43.55	19.43	2.00
10	CLARK 63	1.00	193.25	49.05	19.87	3.50
13	BONUS	1.00	220.25	54.10	21.14	2.50
14	CALLAND	1.00	198.50	44.50	21.81	2.50
2	SWIFT	1.00	192.00	32.98	17.63	4.00
1	ALTONA	1.00	189.25	27.17	18.22	2.00
9	COLUMBUS	1.00	182.75	53.18	18.57	2.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
		0.00	8.91	4.37	0.55	0.44
		0.00%	8.83%	20.38%	5.35%	40.69%
		0.00	25.19	12.48	1.56	1.27
C O R R E L A T I O N S						
(+ - PROB=.05      +- - PROB=.01)						
YIELD	KG/HA	0.00	0.25	0.26	0.55++	-0.25
DAYS TO	FLOWER	0.00	-0.04	0.40++	0.02	0.00
DAYS TO	MATURITY	0.00	0.23	0.51++	0.51++	0.00
NODULE	NUMBER 1	0.00	0.03	0.20	-0.03	0.00
NODULE	NUMBER 2	0.00	0.11	0.24	-0.09	0.00
NODULE	WEIGHT 1	0.00	0.03	0.00	0.07	0.00
NODULE	WEIGHT 2	0.00	-0.15	-0.01	-0.14	0.00
PLANT	HEIGHT	0.00	0.22	0.45++	0.31+	0.00
LOGGING	HEIGHT	0.00	-0.06	-0.15	-0.12	0.00
SHATTER	PLANT	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.04	0.36++	0.00
PODS PER	PLANT	0.00	0.04	1.00	0.05	0.00
100 SEED	WEIGHT	0.00	0.36++	0.05	1.00	0.00
QUALITY	OF SEED	0.00	-0.07	-0.01	-0.10	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	JII	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	1.00



TABLE 145

EXPERIMENT 396

YEAR 1975

## REGION - EUROPE

SITE - MADRID

LATITUDE - 40 DEG. 30 MIN. N

COOPERATORS - J.L. MONTOYA, A. BUENO, A. VICENTE

DATE PLANTED - MAY 23, 1975

SOIL TYPE - SAND, PH 8.0

FERTILIZER USED (KG/HA) - N 25.0, P 120.0, K 120.0

AMOUNT OF MOISTURE - 131 MM

NUMBER OF IRRIGATIONS - 10

## COUNTRY - SPAIN

ELEVATION - 600 M

LONGITUDE - 3 DEG. 17 MIN. W

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	AMSOY 71	2872.66	51.00	138.50	460.00	620.00	0.91	1.50	73.75	1.00
8	WELLS	2844.74	52.25	140.00	327.50	885.00	0.71	3.99	73.75	1.00
6	CORSOY	2826.82	52.25	137.75	492.50	530.00	1.05	1.59	62.50	1.00
3	HARK	2586.35	50.50	138.75	275.00	717.50	0.60	2.57	70.00	1.00
10	WOODWORTH	2552.18	60.75	143.00	227.50	600.00	0.30	1.59	82.75	1.00
4	HODGSON	2526.34	46.75	140.00	520.00	430.00	0.62	0.84	53.75	1.00
7	BEESON	2443.41	51.25	140.00	427.50	912.50	0.96	4.53	78.75	1.00
12	CALLAND	2343.80	53.00	150.25	340.00	572.50	0.62	1.94	88.75	1.50
2	SWIFT	2328.80	50.75	118.00	495.00	610.00	1.31	2.12	55.75	1.25
11	WILLIAMS	2270.87	60.75	146.00	675.00	1147.50	1.77	5.18	90.00	1.25
13	BONUS	2144.60	58.25	150.75	545.00	1270.00	1.34	5.47	96.25	1.25
9	CLARK 63	2096.67	61.00	147.75	545.00	1150.00	1.31	5.25	93.75	1.00
1	ALTONA	1613.24	46.00	107.75	122.50	337.50	0.11	0.93	33.00	1.00
	GRAND MEAN	2419.27	53.42	138.35	419.42	752.50	0.89	2.88	73.29	1.10
	STANDARD ERROR OF A VARIETY MEAN	97.82	0.84	0.97	102.05	161.83	0.32	1.12	3.47	0.18
	COEFFICIENT OF VARIATION	8.09%	3.46%	1.41%	48.66%	43.01%	71.32%	77.49%	9.47%	31.98%
	5% LSD VARIETY MEANS (*****=NS)	280.95	2.43	2.79	293.11	464.81	0.91	3.21	9.97	*****

(+ - PROB=.05    ++ - PROB=.01)

## C O R R E L A T I O N S

YIELD	KG/HA	1.00	-0.06	0.32+	0.11	-0.05	-0.02	-0.11	0.16	-0.20
DAYS TO FLOWER		-0.06	1.00	0.61++	0.20	0.45++	0.28+	0.38++	0.75++	0.12
DAYS TO MATURITY		0.32+	0.61++	1.00	0.28+	0.43++	0.24	0.36++	0.84++	0.14
MODULE NUMBER 1		0.11	0.20	0.28+	1.00	0.45++	0.84++	0.49++	0.31+	0.17
MODULE NUMBER 2		-0.05	0.45++	0.43++	0.45++	1.00	0.51++	0.91++	0.66++	0.12
MODULE WEIGHT 1		-0.02	0.28+	0.24	0.84++	0.51++	1.00	0.62++	0.35+	0.30+
MODULE WEIGHT 2		-0.11	0.38++	0.36++	0.49++	0.91++	0.62++	1.00	0.59++	0.18
PLANT HEIGHT		0.16	0.75++	0.84++	0.31+	0.66++	0.35+	0.59++	1.00	0.22
LODGING		-0.20	0.12	0.14	0.17	0.12	0.30+	0.18	0.22	1.00
SHATTER		-0.01	-0.18	0.02	0.40++	-0.17	0.09	-0.12	-0.21	-0.04
PLANTS HARVEST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.33+	0.27	0.21	0.18	0.09	0.20	0.08	0.17	-0.05
100 SEED WEIGHT		-0.05	0.07	0.33+	0.02	0.16	0.07	0.16	0.33+	0.17
QUALITY OF SEED		-0.47++	0.26	-0.16	-0.02	0.29+	0.14	0.21	0.06	-0.02
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 145 EXPERIMENT 396 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
5	AMSOY 71	1.00	200.00	33.45	14.75	2.00	37.9	20.3
8	WELLS	1.00	200.00	32.90	13.25	2.00	38.1	20.3
6	CORSOY	1.00	200.00	35.73	13.25	2.00	38.8	20.0
3	HARK	1.00	200.00	29.83	13.50	2.00	40.4	19.9
10	WOODWORTH	1.00	200.00	35.08	13.25	2.00	39.3	18.9
4	HODGSON	1.25	200.00	26.88	13.75	1.00	37.3	22.5
7	BEESON	1.00	200.00	22.68	17.00	2.00	41.8	19.2
12	CALLAND	1.00	200.00	26.35	16.25	1.25	39.9	19.8
2	SWIFT	1.00	200.00	29.85	12.50	2.00	35.0	22.1
11	WILLIAMS	1.00	200.00	32.48	16.00	2.75	39.7	19.2
13	BONUS	1.00	200.00	29.80	14.75	3.00	43.1	19.5
9	CLARK 63	1.00	200.00	36.10	13.00	2.00	40.8	18.5
1	ALTONA	1.00	200.00	20.88	13.75	2.75	42.3	19.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
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TABLE 146

EXPERIMENT 391

YEAR 1975

REGION - EUROPE  
 SITE - NOVI SAD  
 LATITUDE - 45 DEG. 20 MIN. N  
 COOPERATOR - BOGDAN EELIC  
 DATE PLANTED - MAY 6, 1975  
 SOIL TYPE - SILT, PH 8.1  
 FERTILIZER USED (KG/HA) - N 30.0, P 60.0, K 50.0  
 AMOUNT CP MOISTURE - 416 MM  
 LOCAL VARIETIES - BELI FOUR, KASNA

COUNTRY - YUGOSLAVIA  
 ELEVATION - 80 M  
 LONGITUDE - 19 DEG. 51 MIN. E  
 DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	CORSOY	4656.76	39.50	139.25	172.25	353.00	2.16	5.64	150.00	5.00
4	HODGSON	4271.69	37.25	129.25	114.50	551.50	1.49	8.10	115.75	3.00
8	WELLS	4156.25	47.00	146.25	107.00	440.50	0.88	5.45	128.75	2.00
7	BEEFSON	4116.66	38.75	146.25	108.50	283.50	1.32	4.28	121.00	3.00
3	HARK	4110.41	39.00	145.00	109.00	449.00	1.00	5.73	135.00	4.00
5	AMSOY 71	4053.73	41.00	146.00	104.50	248.00	0.89	4.36	138.75	2.00
11	WOODWORTH	3848.27	51.25	146.00	127.50	231.75	0.77	3.57	110.75	3.00
2	SWIFT	3727.83	37.25	129.25	149.00	448.50	1.68	7.63	118.75	1.00
13	BELI FOUR	3347.34	38.00	145.00	119.00	284.50	1.71	4.84	132.75	4.00
14	KASNA	3292.74	48.25	145.25	145.75	332.25	1.67	6.68	136.50	4.00
10	CLARK 63	3159.38	52.00	157.00	115.75	291.25	1.10	4.57	126.25	4.00
1	ALTONA	2672.62	37.00	104.00	191.75	465.25	1.65	7.13	119.25	1.00
12	WILLIAMS	2653.45	42.00	164.00	164.50	338.25	1.22	5.38	122.50	3.00
9	COLUMBUS	2057.49	61.00	170.50	118.00	294.00	1.42	5.59	127.25	4.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
CORRELATIONS										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.43++	-0.25	-0.02	0.17	0.04	0.03	0.25	0.05
DAYS TO FLOWER		-0.43++	1.00	0.66++	-0.14	-0.26	-0.17	-0.18	-0.05	0.33+
DAYS TO MATURITY		-0.25	0.66++	1.00	-0.27+	-0.34++	-0.19	-0.29+	0.18	0.55++
NODULE NUMBER 1		-0.02	-0.14	-0.27+	1.00	0.27+	0.71++	0.30+	-0.00	-0.09
NODULE NUMBER 2		0.17	-0.26	-0.34++	0.27+	1.00	0.36++	0.88++	-0.13	-0.19
NODULE WEIGHT 1		0.04	-0.17	-0.19	0.71++	0.36++	1.00	0.44++	0.18	0.12
NODULE WEIGHT 2		0.03	-0.18	-0.29+	0.30+	0.88++	0.44++	1.00	-0.10	-0.16
PLANT		0.25	-0.05	0.18	-0.00	-0.13	0.18	-0.10	1.00	0.50++
LODGING		0.05	0.33+	0.55++	-0.09	-0.19	0.12	-0.16	0.50++	1.00
SHATTER		0.30+	-0.37++	-0.32+	-0.11	0.27+	0.02	0.28+	-0.23	-0.34++
HARVEST		0.36++	-0.16	0.17	-0.03	0.00	-0.04	-0.08	0.17	0.15
PLANT		-0.36++	0.69++	0.41++	0.07	-0.17	0.19	-0.05	0.18	0.57++
100 SEED		0.30+	-0.62++	-0.19	0.01	0.09	-0.07	-0.06	-0.19	-0.36++
QUALITY		-0.10	0.25	0.43++	0.07	-0.11	0.11	-0.02	0.54++	-0.46++
OF SEED		0.01	-0.11	-0.19	0.03	0.11	0.03	0.05	-0.11	-0.25
DISEASE I		0.50++	-0.15	-0.01	0.03	0.10	0.08	0.04	0.16	0.16
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 146 EXPERIMENT 391 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
6	CORSOY	0.00	175.00	73.00	18.60	3.00	42.5	20.7
4	HODGSON	2.00	165.00	51.75	19.63	1.00	39.1	22.6
8	WELLS	0.00	184.75	43.00	18.90	1.00	41.8	20.2
7	BEESON	0.00	181.50	45.25	24.05	1.00	39.8	21.0
3	HARK	0.00	169.75	39.25	20.45	2.00	42.9	20.7
5	AMSOY 71	1.00	163.00	43.50	20.28	2.00	40.9	20.4
11	WOODWORTH	0.00	169.00	61.75	18.05	1.00	41.0	20.3
2	SWIFT	1.00	163.25	48.25	20.13	1.00	39.6	22.1
13	BELI FOUR	0.00	171.50	62.75	17.63	1.00	42.5	20.2
14	KASNA	0.00	178.00	66.25	17.13	1.00	41.7	19.6
10	CLARK 63	0.00	157.00	89.75	17.90	1.00	41.2	21.1
1	ALTONA	0.00	153.75	49.25	19.70	1.00	42.3	20.1
12	WILLIAMS	0.00	179.50	47.25	21.65	2.00	43.4	19.9
9	COLUMBUS	0.00	154.50	92.00	16.15	3.00	44.2	20.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.29	168.96	58.07	19.30	1.50		
COEFFICIENT OF VARIATION		0.00%	4.34	2.41	0.18	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	5.14%	8.30%	1.90%	0.00%		
			12.41	6.88	0.52	0.00		
C O R R E L A T I O N S								
(+ - PROB=.05    ++ - PROB=.01)								
YIELD	KG/HA	0.30+	0.36++	-0.36++	0.30+	-0.10	0.01	0.50++
DAYS TO FLOWER		-0.37++	-0.16	0.69++	-0.62++	0.25	-0.11	-0.15
DAYS TO MATURITY		-0.32+	0.17	0.41++	-0.19	0.43++	-0.19	0.00
NODULE NUMBER 1		-0.11	-0.03	0.07	0.01	0.07	0.03	0.00
NODULE NUMBER 2		0.27+	-0.00	-0.17	0.09	-0.11	0.11	0.10
NODULE WEIGHT 1		0.02	-0.04	0.19	-0.07	0.11	0.03	0.00
NODULE WEIGHT 2		0.28+	-0.08	-0.05	-0.02	-0.06	0.05	0.00
PLANT	HEIGHT	-0.23	0.17	0.18	-0.19	0.54++	-0.11	0.00
	LODGING	-0.34++	0.15	0.57++	-0.36++	0.46++	-0.25	0.16
	SHATTER	1.00	-0.19	-0.27+	0.15	-0.17	0.38++	-0.11
PLANTS	HARVEST	-0.19	1.00	-0.33+	0.27+	-0.09	-0.49++	0.00
PODS PER	PLANT	-0.27+	-0.33+	1.00	-0.68++	0.31+	0.13	0.64++
100 SEED	WEIGHT	0.15	0.27+	-0.68++	1.00	-0.16	0.07	0.27+
QUALITY	OF SEED	-0.17	-0.09	0.31+	-0.16	1.00	0.30+	0.00
DISEASE	I	-0.38++	-0.49++	0.13	0.07	0.30+	1.00	-0.06
DISEASE	II	-0.11	0.64++	-0.27+	0.29+	-0.06	-0.51++	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 147 EXPERIMENT 335 YEAR 1975

REGION - MESOAMERICA COUNTRY - BAHAMAS  
 SITE - SAN ANDROS ELEVATION - 1.5 M  
 LATITUDE - 24 DEG. 57 MIN. N LONGITUDE - 78 DEG. 1 MIN. W  
 COOPERATOR - J. HAROLD STERN  
 DATE PLANTED - MAY 15, 1975 DATE HARVESTED - AUGUST, 1975  
 SOIL TYPE - OOLITIC-LIMESTONE PINE ROCK-LAND, PH 7.6  
 FERTILIZER USED (KG/HA) - N 134.4, P 219.2, K 111.0  
 AMOUNT OF MOISTURE - 794 MM  
 NUMBER OF IRRIGATIONS - 2 (25.5 MM)

PNTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
9	FORREST	3523.62	30.00	91.00	294.00	396.75	0.00	0.00	48.75	1.00
7	DAVIS	3448.61	39.50	91.00	193.50	344.00	0.00	0.00	50.75	1.00
2	HAMPTON 266A	3319.00	29.75	131.50	337.25	344.75	0.00	0.00	61.25	1.00
3	HARDEE	3069.36	57.50	151.00	573.75	548.00	0.00	0.00	93.25	1.00
6	BOSSIER	2981.01	37.75	131.50	212.00	357.00	0.00	0.00	64.00	1.00
4	IMPROVED PELICAN	2856.82	53.50	156.00	341.00	298.75	0.00	0.00	153.00	1.00
11	CLARK 63	2843.90	28.00	91.00	259.50	283.75	0.00	0.00	64.00	1.00
15	SEMMES	2815.56	34.75	146.00	401.25	471.25	0.00	0.00	48.75	1.00
1	JUPITER	2740.13	64.75	161.00	419.75	278.00	0.00	0.00	129.25	1.00
10	COLUMBUS	2674.28	28.00	91.00	417.75	408.00	0.00	0.00	81.50	1.00
8	TRACY	2593.85	28.00	98.75	345.00	418.50	0.00	0.00	49.25	1.00
13	WILLIAMS	2478.83	28.00	91.00	333.25	293.50	0.00	0.00	74.50	1.00
12	WOODWORTH	2462.16	28.00	91.00	313.75	223.00	0.00	0.00	53.50	1.00
5	COBB	2333.80	27.00	91.00	323.00	261.50	0.00	0.00	28.25	1.00
14	CALLAND	2176.27	28.00	91.00	337.75	255.00	0.00	0.00	78.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.13	0.06	0.02	0.17	0.00	0.00	-0.07	0.00
DAYS TO FLOWER	1.00	0.73++	0.29+	-0.00	0.00	0.00	0.00	0.00	0.71++	0.00
DAYS TO MATURITY	0.06	0.73++	1.00	0.31+	0.08	0.00	0.00	0.00	0.59++	0.00
NODULE NUMBER 1	0.02	0.29+	0.31+	1.00	0.35++	0.00	0.00	0.00	0.26+	0.00
NODULE NUMBER 2	0.17	-0.00	0.08	0.35++	1.00	0.00	0.00	0.00	-0.05	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
PLANT HEIGHT	-0.07	0.71++	0.59++	0.26+	-0.05	0.00	0.00	0.00	1.00	0.00
LOGGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	-0.12	-0.01	-0.03	-0.03	-0.12	0.00	0.00	0.00	0.01	0.00
PODS PER PLANT	0.22	0.85++	0.79++	0.25+	0.14	0.00	0.00	0.00	0.74++	0.00
100 SEED WEIGHT	0.01	-0.24	-0.24	-0.10	-0.04	0.00	0.00	0.00	-0.09	0.00
QUALITY OF SEED	0.01	0.04	0.23	0.04	0.05	0.00	0.00	0.00	-0.13	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 147  
EXPERIMENT 335  
YEAR 1975  
(CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HAPVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.00	90.00	58.50	12.75	1.00	40.0	22.4
7	DAVIS	1.00	81.90	55.75	11.00	2.75	39.5	23.1
2	HAMPTON 246A	1.00	76.25	65.75	15.00	5.00	37.8	26.7
3	HARDEE	1.00	83.50	111.75	11.00	2.75	42.8	21.8
6	BOSSIER	1.00	93.25	83.50	10.50	2.75	40.8	23.8
4	IMPROVED PELICAN	1.00	83.25	134.50	10.75	2.00	41.6	23.1
11	CLARK 63	1.00	76.25	36.25	13.50	2.00	42.1	23.2
15	SEMMES	1.00	89.75	66.50	11.25	4.00	41.7	22.6
1	JUPITER	1.00	89.00	114.50	11.00	2.00	42.5	23.0
10	COLUMBUS	1.00	82.50	41.50	11.50	2.00	43.9	21.9
8	TRACY	1.00	90.50	57.25	9.50	1.00	42.1	22.0
13	WILLIAMS	1.00	101.00	48.25	14.25	1.75	42.5	23.2
12	WOODWORTH	1.00	81.75	43.00	13.25	1.25	41.3	24.3
5	COBB	1.00	89.00	30.00	10.50	3.75	40.4	24.1
14	CALLAND	1.00	90.75	39.75	17.00	3.00	42.1	22.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O P R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.12	0.22	0.01	0.01	0.00	0.00
DAYS TO FLOWER		0.00	-0.01	0.35++	-0.24	0.04	0.00	0.00
DAYS TO MATURITY		0.00	-0.03	0.79++	-0.24	0.23	0.00	0.00
MODULE NUMBER 1		0.00	-0.03	0.25+	-0.10	0.04	0.00	0.00
MODULE NUMBER 2		0.00	-0.12	0.14	-0.04	0.06	0.00	0.00
MODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
MODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.01	0.74++	-0.09	-0.13	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.05	-0.15	-0.09	0.00	0.00
PODS PER PLANT		0.00	-0.05	1.00	-0.22	0.02	0.00	0.00
100 SEED WEIGHT		0.00	-0.15	-0.22	1.00	0.12	0.00	0.00
QUALITY OF SEED		0.00	-0.09	0.02	0.00	0.12	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 148 EXPERIMENT 636 YEAR 1975

REGION - MESOAMERICA  
 SITE - CENTRAL FARM  
 LATITUDE - 17 DEG. 13 MIN. N  
 COOPERATOR - E. GARCIA  
 DATE PLANTED - DECEMBER 8, 1975  
 SOIL TYPE - CLAY LOAM, PH 6 - 6.5  
 AMOUNT OF MOISTURE - 671 MM

COUNTRY - BELIZE  
 ELEVATION - 61 M  
 LONGITUDE - 89 DEG. 2 MIN. W  
 DATE HARVESTED - MARCH, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	TRACY	1300.26	45.75	95.00	0.00	0.00	0.00	0.00	25.30	2.00
7	FORREST	1178.57	43.75	90.75	0.00	0.00	0.00	0.00	27.20	1.00
4	COBB	1153.56	43.25	93.75	0.00	0.00	0.00	0.00	26.43	1.50
12	SEMME	1147.31	44.75	91.25	0.00	0.00	0.00	0.00	25.48	1.50
1	HAMPTON 266A	1137.73	44.00	93.25	0.00	0.00	0.00	0.00	27.85	1.25
8	COLUMBUS	1083.13	43.63	98.25	0.00	0.00	0.00	0.00	27.78	1.50
9	WOODWORTH	1008.12	42.00	101.00	0.00	0.00	0.00	0.00	18.03	1.75
10	WILLIAMS	1007.28	40.00	97.25	0.00	0.00	0.00	0.00	17.83	2.00
5	DAVIS	977.28	41.00	93.75	0.00	0.00	0.00	0.00	26.95	2.00
11	CALLAND	899.72	41.25	94.25	0.00	0.00	0.00	0.00	31.08	1.50
2	HAPDE	718.56	44.25	93.25	0.00	0.00	0.00	0.00	24.65	1.00
3	IMPROVED PELICAN	530.52	43.25	94.50	0.00	0.00	0.00	0.00	24.75	1.25
GRAND MEAN		1011.84	43.07	94.69	0.00	0.00	0.00	0.00	25.27	1.52
STANDARD ERROR OF A VARIETY MEAN		261.56	1.73	2.71	0.00	0.00	0.00	0.00	3.64	0.30
COEFFICIENT OF VARIATION		51.70%	8.06%	5.73%	0.00%	0.00%	0.00%	0.00%	28.77%	39.96%
5% LSD VARIETY MEANS (*****=NS)		*****	*****	*****	0.00	0.00	0.00	0.00	*****	*****
C O R R E L A T I O N S										
(+ - PROB=-.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.51++	-0.18	0.00	0.00	0.00	0.00	0.01	0.13
DAYS TO FLOWER		0.51++	1.00	-0.17	0.00	0.00	0.00	0.00	0.01	0.00
DAYS TO MATURITY		-0.18	-0.17	1.00	0.00	0.00	0.00	0.00	-0.33+	0.23
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.01	0.01	-0.33+	0.00	0.00	0.00	0.00	1.00	-0.13
LODGING		0.13	0.00	0.23	0.00	0.00	0.00	0.00	-0.13	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.02	0.09	-0.17	0.00	0.00	0.00	0.00	0.28	-0.26
PODS PER PLANT		-0.07	-0.16	0.03	0.00	0.00	0.00	0.00	0.33+	0.24
100 SEED WEIGHT		0.23	0.37++	0.31+	0.00	0.00	0.00	0.00	-0.20	0.08
QUALITY OF SEED		0.11	0.25	-0.07	0.00	0.00	0.00	0.00	0.18	0.14
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 148 EXPERIMENT 636 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
6	TRACY	0.00	86.75	27.23	23.35	2.50	42.4	20.8
7	FORREST	0.00	81.75	24.13	21.68	2.50	44.2	20.1
4	COBB	0.00	90.25	26.33	22.60	2.00	--	--
12	SEMMERS	0.00	106.50	21.65	21.78	2.75	45.9	19.8
1	HAMPTON 266A	0.00	94.75	16.48	20.85	2.50	41.6	22.1
8	COLUMBUS	0.00	90.75	22.15	23.93	2.75	44.7	22.1
9	WOODWORTH	0.00	53.25	17.48	24.13	2.50	41.4	22.9
10	WILLIAMS	0.00	79.00	26.60	21.60	2.00	42.4	22.7
5	DAVIS	0.00	98.25	33.18	21.60	2.00	42.3	22.2
11	CALLAND	0.00	68.50	25.98	21.08	2.00	44.6	21.1
2	HARDEE	0.00	108.00	25.20	21.33	2.00	44.8	20.6
3	IMPROVED PELICAN	0.00	91.50	18.40	22.75	2.00	43.4	21.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	87.44	23.73	22.22	2.29		
COEFFICIENT OF VARIATION		0.00	12.52	3.44	1.24	0.36		
5% LSD VARIETY MEANS (*****=NS)		0.00	28.64%	29.03%	11.13%	31.40%		
		0.00	*****	*****	*****	*****		
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.02	-0.07	0.23	0.11	0.00	0.00
DAYS TO FLOWER		0.00	0.09	-0.16	0.37+	0.25	0.00	0.00
DAYS TO MATURITY		0.00	-0.17	0.03	0.31+	-0.07	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.28	0.33+	-0.20	0.18	0.00	0.00
LODGING		0.00	-0.26	0.24	0.08	0.14	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.20	0.02	0.04	0.00	0.00
PODS PER PLANT		0.00	0.20	1.00	-0.01	-0.13	0.00	0.00
100 SEED WEIGHT		0.00	0.02	-0.01	1.00	0.05	0.00	0.00
QUALITY OF SEED		0.00	0.04	-0.13	0.05	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 149

EXPERIMENT 412

YEAR 1975

REGION - MESOAMERICA  
 SITE - CANAS  
 LATITUDE - 10 DEG. 24 MIN. N  
 COOPERATOR - RODRIGO ALFARO MONGE  
 DATE PLANTED - OCTOBER 6, 1975  
 SOIL TYPE - SAND 40%, SILT 37%, CLAY 23%, PH 6.2  
 FERTILIZER USED (KG/HA) - N 60.0  
 AMOUNT OF MOISTURE - 725 MM

COUNTRY - COSTA RICA

ELEVATION - 9 M

LONGITUDE - 85 DEG. 8 MIN. W

DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2135.84	44.00	137.00	226.50	479.00	1.79	5.25	1.79	5.25	71.25	2.00
7	DAVIS	1779.52	38.00	106.00	368.25	513.50	3.28	5.60	3.28	5.60	33.75	1.00
3	HARDEE	1750.35	38.00	106.00	409.75	688.25	2.76	6.97	2.76	6.97	31.25	1.00
14	CALLAND	1687.84	36.00	93.00	219.00	354.75	2.98	6.42	2.98	6.42	50.25	1.25
10	COLUMBUS	1635.74	36.00	92.00	272.25	484.00	2.93	5.24	2.93	5.24	45.50	1.50
5	CORB	1589.90	38.00	106.00	351.75	546.25	2.74	4.80	2.74	4.80	33.75	1.00
6	BOSSIER	1573.23	36.00	93.00	260.50	472.00	1.85	4.57	1.85	4.57	31.50	1.25
13	WILLIAMS	1533.64	36.00	92.00	340.50	490.25	2.91	5.03	2.91	5.03	45.25	1.00
4	IMPROVED PELICAN	1427.37	41.00	106.00	249.50	633.50	2.12	5.75	2.12	5.75	52.50	1.25
2	HAMPTON 266A	1406.53	38.00	106.00	386.75	469.00	2.79	4.97	2.79	4.97	27.00	1.00
12	WOODWORTH	1364.86	36.00	92.00	217.00	300.75	2.02	3.46	2.02	3.46	46.75	1.00
11	CLARK 63	1362.77	36.00	92.00	252.00	343.00	2.06	3.68	2.06	3.68	45.50	1.50
9	FORREST	1344.02	36.00	92.25	294.00	528.50	2.43	5.17	2.43	5.17	35.75	1.00
15	SEMME	1283.59	36.00	93.00	335.00	507.00	2.19	4.17	2.19	4.17	28.25	1.00
8	TRACY	1125.22	36.00	93.00	315.25	357.25	2.67	4.28	2.67	4.28	32.75	1.25
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% LSD VARIETY MEANS (*****=NS)												
C O R R E L A T I O N S												
(* - PROB=.05 ** - PROB=.01)												
YIELD	KG/HA	1.00	0.41++	0.47++	-0.04	0.07	0.10	0.28+	0.36++	0.32+	0.32+	0.32+
DAYS TO FLOWER	0.41++	1.00	0.95++	0.95++	-0.06	0.29+	-0.19	0.22	0.57++	0.37++	0.37++	0.37++
DAYS TO MATURITY	0.47++	0.95++	1.00	0.02	0.26+	0.13	0.67++	-0.02	0.47++	0.36++	0.36++	0.36++
NODULE NUMBER 1	-0.04	-0.06	-0.06	0.02	1.00	0.13	0.13	-0.02	-0.45++	-0.29+	-0.29+	-0.29+
NODULE NUMBER 2	0.07	0.29+	0.26+	0.13	0.13	1.00	0.02	0.66++	-0.11	-0.10	-0.10	-0.10
NODULE WEIGHT 1	0.10	-0.19	-0.13	0.67++	-0.02	0.02	1.00	0.18	-0.17	-0.12	-0.12	-0.12
NODULE WEIGHT 2	0.28+	0.22	0.22	-0.02	0.66++	0.13	0.13	1.00	0.11	0.04	0.04	0.04
PLANT HEIGHT	0.36++	0.36++	0.47++	0.47++	-0.45++	-0.11	-0.17	0.11	0.55++	0.55++	0.55++	0.55++
LODGING	0.32+	0.32+	0.37++	0.36++	-0.29+	-0.10	-0.12	0.04	0.19	0.19	0.19	0.19
SHATTER	-0.15	-0.03	-0.03	-0.04	-0.06	0.04	-0.11	0.03	-0.19	-0.10	-0.10	-0.10
PLANTS HARVEST	0.06	0.29+	0.16	0.16	-0.01	0.11	-0.03	-0.03	0.20	0.20	0.20	0.20
PODS PER PLANT	0.31+	0.39++	0.33++	0.33++	-0.19	0.06	-0.20	0.09	0.41++	0.41++	0.41++	0.41++
100 SEED WEIGHT	0.31+	-0.02	0.19	0.19	0.12	-0.25	0.19	-0.04	-0.15	-0.15	-0.15	-0.15
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 149  
EXPERIMENT 412  
YEAR 1975  
(CONTINUED)

ENTRY NUMBFR	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	213.75	25.75	18.25	1.00
7	DAVIS	1.50	225.50	21.25	16.68	1.00
3	HARDEE	1.25	163.75	26.75	15.50	1.00
14	CALLAND	1.25	186.75	21.00	17.45	1.00
10	COLUMBUS	1.75	182.00	20.75	16.43	1.00
5	COBB	1.50	181.75	23.00	18.13	1.00
6	ROSSIER	1.00	188.50	19.50	16.83	1.00
13	WILLIAMS	1.00	201.50	23.50	16.75	1.00
4	IMPROVED PELICAN	1.50	239.75	26.00	11.00	1.00
2	HAMPTON 266A	2.00	193.25	17.25	20.50	1.00
12	WOODWORTH	1.50	190.25	22.00	16.33	1.00
11	CLARK 63	1.25	195.00	24.00	14.13	1.00
9	FORREST	1.00	200.00	18.75	14.45	1.00
15	SEMME	1.25	226.75	18.25	15.70	1.00
8	TRACY	1.75	209.75	16.25	17.95	1.00
	GRAND MEAN	1.37	199.88	21.60	16.40	1.00
	STANDARD ERROR OF A VARIETY MEAN	0.27	8.87	1.81	0.73	0.00
	COEFFICIENT OF VARIATION	38.95%	8.88%	16.73%	8.95%	0.00%
	5% LSD VARIETY MEANS (*****=NS)	*****	25.36	5.16	2.10	0.00
C O R R E L A T I O N S						
	YIELD				(+ - PROB=.05	++ - PROB=.01)
	KG/HA					
	DAYS TO FLOWER	-0.15	0.06	0.31+	0.00	0.00
	DAYS TO MATURITY	-0.03	0.29+	0.39++	-0.02	0.00
	NODULE NUMBER 1	-0.04	0.16	0.33++	0.00	0.00
	NODULE NUMBER 2	-0.06	-0.01	-0.19	0.00	0.00
	NODULE HEIGHT 1	0.04	0.11	0.06	0.00	0.00
	NODULE HEIGHT 2	-0.11	-0.03	-0.20	-0.25	0.00
	NODULE PLANT	0.03	-0.10	0.09	0.00	0.00
	HEIGHT	-0.19	0.20	0.41++	-0.04	0.00
	LODGING	-0.10	0.19	0.20	-0.15	0.00
	SHATTER	1.00	0.01	-0.07	0.12	0.00
	HARVEST	0.01	1.00	-0.08	0.11	0.00
	PLANT	-0.07	-0.08	1.00	-0.25+	0.00
	WEIGHT	0.11	-0.25+	-0.25	-0.25	0.00
	OF SEED	0.00	0.00	0.00	1.00	0.00
	QUALITY	0.00	0.00	0.00	0.00	0.00
	DISEASE I	0.00	0.00	0.00	0.00	0.00
	DISEASE II	0.00	0.00	0.00	0.00	0.00
	DISEASE III	0.00	0.00	0.00	0.00	0.00



TABLE 150 EXPERIMENT 614 YEAR 1975

REGION - MESOAMERICA COUNTRY - COSTA RICA  
 SITE - GUANACASTA ELEVATION - 43 M  
 LATITUDE - 10 DEG. 14 MIN. N LONGITUDE - 85 DEG. 42 MIN. W  
 COOPERATOR - RODRIGO ALFARO MONGE  
 DATE PLANTED - SEPTEMBER 3, 1975 DATE HARVESTED - DECEMBER, 1975  
 SOIL TYPE - SAND 29%, SILT 42%, CLAY 30%, PH 6.3  
 FERTILIZER USED (KG/HA) - N 60.0  
 AMOUNT OF MOISTURE - 919 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	2055.83	32.25	103.50	97.00	176.75	0.58	1.24	64.25	2.25
13	HILLIAMS	1954.56	28.75	100.50	110.25	152.00	0.53	1.46	44.00	1.75
3	HARDEE	1934.97	32.25	103.50	103.00	148.25	0.67	1.44	65.75	2.25
10	COLUMBUS	1932.47	28.25	102.00	86.25	193.25	0.40	2.08	48.75	1.50
2	HAMPTON 266A	1911.63	28.00	100.50	133.50	236.25	0.68	1.57	43.25	1.25
9	FORREST	1892.46	28.75	102.00	133.50	230.00	1.29	2.84	32.00	1.00
8	TRACY	1879.13	27.50	100.50	114.00	189.25	0.64	1.74	43.00	1.50
5	COBB	1803.28	31.00	100.50	140.25	142.00	0.67	1.44	67.00	2.00
11	CLARK 63	1682.42	28.00	102.00	94.00	231.75	0.56	2.52	46.25	1.75
6	BOSSIER	1568.23	29.00	102.00	103.25	173.50	0.60	1.86	46.25	1.50
14	CALLAND	1549.06	27.75	102.00	107.25	213.25	0.62	2.72	37.50	1.50
1	JUPIITER	1526.56	29.00	102.00	116.00	256.75	0.61	2.45	56.75	2.25
7	DAVIS	1496.55	27.50	102.00	102.00	173.00	0.58	1.46	37.50	2.00
15	SEMMES	1343.02	28.75	102.00	71.25	161.50	0.48	1.73	35.25	1.50
12	WOODWORTH	1073.13	30.25	105.00	89.25	187.50	0.66	1.70	43.00	1.75
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.27+	-0.03	0.38++	0.28+	0.25	0.18	0.25+	-0.03
DAYS TO FLOWER	0.27+	1.00	0.55++	-0.01	-0.01	-0.01	-0.02	-0.16	0.48++	0.33++
DAYS TO MATURITY	-0.03	0.55++	1.00	-0.05	0.16	0.16	0.08	0.09	-0.05	-0.11
NODULE NUMBER 1	0.38++	-0.01	-0.05	1.00	0.49++	0.49++	0.68++	0.34++	0.07	-0.22
NODULE NUMBER 2	0.28+	-0.01	0.16	0.49++	1.00	1.00	0.42++	0.70++	0.09	-0.13
NODULE WEIGHT 1	0.25	-0.02	0.08	0.68++	0.42++	0.42++	1.00	0.42++	-0.01	-0.16
NODULE WEIGHT 2	0.18	-0.16	0.09	0.34++	0.70++	0.70++	0.42++	1.00	-0.11	-0.29+
PLANT HEIGHT	0.25+	0.48++	-0.05	0.07	0.34++	0.34++	-0.01	-0.11	1.00	0.63++
LODGING	-0.03	0.33++	-0.11	-0.22	-0.13	-0.13	-0.16	-0.29+	0.63++	1.00
SHATTER	0.09	0.01	0.0	-0.05	-0.05	-0.05	-0.06	0.07	-0.21	-0.16
HARVEST	0.65++	0.29+	-0.00	0.34++	0.34++	0.34++	0.13	0.09	0.19	-0.01
PODS PER PLANT	-0.18	0.02	0.03	-0.30+	-0.30+	-0.30+	-0.14	-0.24	-0.05	-0.08
100 SEED WEIGHT	0.09	-0.10	0.26	0.45++	0.45++	0.36++	0.35++	0.35++	-0.32+	-0.47++
QUALITY OF SEED	-0.25	-0.22	0.18	0.02	0.02	0.02	-0.01	0.06	-0.18	-0.09
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 150 EXPERIMENT 614 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
4	IMPROVED PELICAN	1.00	175.75	31.50	18.25	1.00
13	WILLIAMS	1.25	157.25	29.25	21.00	1.25
3	HARDEE	1.00	154.50	27.75	20.48	1.25
10	COLUMBUS	1.00	135.25	41.25	19.93	1.50
2	HAMPTON 266A	1.00	140.75	33.75	21.08	1.75
9	FORREST	1.00	161.25	29.75	20.98	1.50
8	TRACY	1.00	160.00	27.00	20.50	1.75
5	COBB	1.00	165.50	24.00	19.00	1.25
11	CLARK 63	1.00	136.25	26.00	19.63	1.75
6	BOSSIER	1.50	162.25	29.00	20.30	1.25
14	CALLAND	1.00	137.75	33.00	20.33	1.00
1	JUPITER	1.25	137.50	23.50	20.60	1.75
7	DAVIS	1.00	165.50	27.50	18.70	1.25
15	SEMMES	1.00	102.50	39.75	19.60	1.50
12	WOODWORTH	1.00	110.50	31.25	19.90	1.25
GRAND MEAN						
		1.07	146.83	30.28	20.02	1.40
STANDARD ERROR OF A VARIETY MEAN		0.12	21.21	4.17	1.11	0.24
COEFFICIENT OF VARIATION		22.25%	28.89%	27.53%	11.09%	34.09%
5% LSD VARIETY MEANS (*****=NS)						
		*****	*****	*****	*****	*****
C O R R E L A T I O N S						
(+ - PROB=.05      + + - PROB=.01)						
YIELD	KG/HA	0.09	0.65++	-0.18	0.09	-0.25
DAYS TO FLOWER		0.01	0.29+	0.02	-0.10	0.00
DAYS TO MATURITY		0.0	-0.00	0.03	0.26+	0.00
NODULE NUMBER 1		-0.05	0.34++	-0.30+	0.45+	0.00
NODULE NUMBER 2		-0.05	0.23	-0.30+	0.36++	0.00
NODULE WEIGHT 1		-0.06	0.13	-0.14	0.35++	0.00
NODULE WEIGHT 2		0.07	0.09	-0.24	0.35++	0.00
PLANT HEIGHT		-0.21	0.19	-0.05	-0.32+	0.00
LODGING		-0.16	-0.01	-0.08	-0.47++	0.00
SHATTER		1.00	0.20	-0.18	0.20	0.00
HARVEST		0.20	1.00	-0.54++	-0.03	0.00
PLANTS PER PLANT		-0.18	-0.54++	1.00	-0.22	0.00
100 SEED WEIGHT		0.20	-0.03	-0.22	1.00	0.00
QUALITY OF SEED		-0.07	-0.24	-0.10	0.26+	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00
						1.00

TABLE 151

EXPERIMENT 654

YEAR 1975

REGION - MESOAMERICA  
 SITE - LA LIMA  
 LATITUDE - 15 DEG. 24 MIN. N  
 COOPERATORS - D.L. RICHARDSON, J. ROMERO  
 DATE PLANTED - FEBRUARY 12, 1976  
 DATE HARVESTED - MAY, 1976  
 AMOUNT OF MOISTURE - 453 MM  
 NUMBER OF IRRIGATIONS - 4 (152 MM)  
 LOCAL VARIETIES - SIATSA 194, SIATSA 166  
 SUBSTITUTE VARIETIES - PICKETT 71, BONUS

COUNTRY - HONDURAS

ELEVATION - 31 M

LONGITUDE - 87 DEG. 57 MIN. W

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
14	SIATSA 194	4253.77	29.00	50.25	0.00	3.00	0.00	3.00	81.75	1.75
1	JUPITER	4253.35	29.50	94.00	0.00	0.00	0.00	0.00	69.00	1.25
3	HARDEE	4252.93	16.00	91.25	0.00	0.00	0.00	0.00	35.75	1.00
15	SIATSA 166	3402.35	29.00	89.25	3.00	3.00	3.00	3.00	83.50	1.50
10	COLUMBUS	3232.31	10.25	69.50	0.00	0.00	0.00	0.00	46.00	1.75
5	FORREST	3118.96	12.75	70.75	0.00	0.00	0.00	0.00	43.00	1.00
13	WILLIAMS	2721.79	11.25	66.00	0.00	0.00	0.00	0.00	44.00	1.50
4	PICKETT 71	2589.68	10.25	76.50	0.00	0.00	0.00	0.00	26.50	1.00
7	BONUS	2514.25	13.00	69.50	3.00	3.00	3.00	3.00	45.75	1.00
6	BOSSIER	2495.08	10.00	70.75	0.00	0.00	0.00	0.00	26.50	1.00
2	HAMPTON 266A	2306.25	10.00	94.25	3.00	3.00	3.00	3.00	22.25	1.00
12	WOODWORTH	2041.66	11.25	66.25	0.00	0.00	0.00	0.00	40.50	1.25
8	TRACY	1496.55	11.75	66.00	0.00	0.00	0.00	0.00	24.75	1.00
11	CLARK 63	1474.46	11.00	73.50	3.00	3.00	3.00	3.00	36.00	1.25
5	COEB	1209.83	12.00	94.00	0.00	0.00	0.00	0.00	19.75	1.00
	GRAND MEAN	2757.55	14.93	78.58	3.00	3.00	3.00	3.00	42.80	1.22
	STANDARD ERROR OF A VARIETY MEAN	223.02	1.43	3.63	0.00	0.00	0.00	0.00	1.76	0.17
	COEFFICIENT OF VARIATION	16.17%	3.48%	3.63%	0.00%	0.00%	0.00%	0.00%	8.25%	28.45%
	5% ISI VARIETY MEANS (*****=NS)	636.50	0.74	4.07	0.00	0.00	0.00	0.00	5.04	0.49

(+ - PROB=.05 \*\* - PROB=.01)

C O R R E L A T I O N S

YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA
1.00	0.63++	0.63++	0.38++	0.00	0.00	0.00	0.00	0.00	0.63++	0.27+
0.63++	1.00	0.63++	0.58++	0.00	0.00	0.00	0.00	0.00	0.87++	0.31+
0.38++	0.38++	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.27+	-0.01
0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
0.63++	0.63++	0.63++	0.27+	0.00	0.00	0.00	0.00	0.00	1.00	3.48++
0.27+	0.27+	0.31+	-0.01	0.00	0.00	0.00	0.00	0.00	0.48++	1.00
-0.02	0.02	0.18	0.30+	0.00	0.00	0.00	0.00	0.00	0.10	-0.04
0.60++	0.60++	0.21	-0.01	0.00	0.00	0.00	0.00	0.00	0.34++	0.07
0.29+	0.29+	0.61+	0.45++	0.00	0.00	0.00	0.00	0.00	0.47++	0.27+
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 151 EXPERIMENT 654 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
14	SIATSA 194	1.25	321.75	41.25	0.00	0.00	46.5	19.1
1	JUPITER	1.00	217.25	40.13	0.00	0.00	45.3	22.8
3	HARDEE	1.25	296.25	30.43	0.00	0.00	45.2	25.3
15	SIATSA 166	1.75	302.75	35.63	0.00	0.00	45.6	19.6
10	COLUMBUS	1.00	269.50	21.10	0.00	0.00	45.0	21.3
5	FORREST	1.00	293.75	24.55	0.00	0.00	42.7	25.3
13	WILLIAMS	1.00	254.25	18.68	0.00	0.00	44.8	22.1
4	PICKETT 71	1.25	338.25	15.68	0.00	0.00	--	--
7	BONUS	1.50	296.75	19.43	0.00	0.00	45.0	21.0
6	BOSSIER	1.00	261.50	22.45	0.00	0.00	45.9	22.2
2	HAMPTON 266A	1.25	249.25	22.28	0.00	0.00	44.8	21.6
12	WCCLOWORTH	1.00	195.50	24.18	0.00	0.00	38.8	25.4
8	TRACY	1.00	232.00	20.00	0.00	0.00	43.2	19.9
11	CIARK 63	1.00	66.75	43.33	0.00	0.00	41.9	24.3
5	COBB	1.50	60.75	32.53	0.00	0.00	41.0	24.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.18	243.75	27.42	0.00	0.00		
COEFFICIENT OF VARIATION		0.21	14.89	2.42	0.00%	0.00%		
5% ISI VARIETY MEANS (*****=NS)		35.23%	12.22%	17.69%	0.00%	0.00%		
		*****	42.51	6.92	0.00	0.00		
C C R E L A T I O N S								
			(+ - PROB=.05			+ - PROB=.01)		
YIELD	KG/HA	-0.02	0.60++	0.29+	0.00	0.00		
DAYS TO FLOWER		0.18	0.21	0.61++	0.00	0.00		
DAYS TO MATURITY		0.30+	-0.01	0.45++	0.00	0.00		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		0.10	0.34++	0.47++	0.00	0.00		
LOGGING		-0.04	0.00	0.27+	0.00	0.00		
SHATTER		1.00	0.09	0.10	0.00	0.00		
PLANTS HARVEST		0.09	1.00	-0.31+	0.00	0.00		
PODS PER PLANT		0.10	-0.31+	1.00	0.00	0.00		
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00		
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00		



TABLE 152

EXPERIMENT 346

YEAR 1975

REGION - MESOAMERICA  
 SITE - CAYMANAS  
 LATITUDE - 18 DEG. N  
 COOPERATOR - HAROLD R. WILSON  
 DATE PLANTED - APRIL 23, 1975  
 SOIL TYPE - SAND 22%, SILT 22%, CLAY 28%, PH 6.8  
 FERTILIZER USED (KG/HA) - N 25.0, P 25.0, K 37.5  
 AMOUNT OF MOISTURE - 276 MM (+ 2 FURROW IRRIGATIONS)  
 NUMBER OF IRRIGATIONS - 4 SPRINKLER (204 MM) + 2 FURROW  
 SUBSTITUTION VARIETY - PICKETT 71

COUNTRY - JAMAICA  
 ELEVATION - 1.5 M  
 LONGITUDE - 77 DEG. E

DATE HARVESTED - AUGUST, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
10	COLUMBDS	3874.11	30.50	88.50	31.25	0.00	0.00	0.00	40.50	1.50
13	WILLIAMS	3605.30	30.50	89.25	63.25	0.00	0.00	0.00	45.00	1.75
9	FORREST	3046.44	30.00	86.00	32.25	0.00	0.00	0.00	35.75	1.00
11	CLARK 63	2913.50	31.00	87.00	41.75	0.00	0.00	0.00	44.50	1.25
7	DAVIS	2856.40	32.00	89.50	42.00	0.00	0.00	0.00	36.75	1.25
14	CALLAND	2810.56	30.00	88.00	44.00	0.00	0.00	0.00	45.00	1.00
8	TRACY	2695.54	32.00	89.50	33.00	0.00	0.00	0.00	34.00	1.00
5	PICKETT 71	2326.72	34.00	95.00	37.25	0.00	0.00	0.00	30.50	1.00
15	SPIMES	2252.12	28.50	85.75	40.50	0.00	0.00	0.00	30.00	1.25
2	HAMPTON 266A	2102.92	34.25	92.75	37.75	0.00	0.00	0.00	31.75	1.50
3	HARDEE	2029.57	30.00	88.00	20.00	0.00	0.00	0.00	45.75	1.50
6	BOSSIER	2010.82	35.50	96.00	35.25	0.00	0.00	0.00	45.50	1.00
12	WOODWORTH	1948.72	29.00	88.00	57.50	0.00	0.00	0.00	35.50	1.00
1	JUPITER	1860.37	45.00	98.00	42.50	0.00	0.00	0.00	79.50	2.50
4	IMPROVED PELICAN	1464.88	55.00	95.00	71.00	0.00	0.00	0.00	106.00	3.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2519.86	33.82	90.42	41.95	0.00	0.00	0.00	45.73	1.45
COEFFICIENT OF VARIATION		465.71	0.54	0.89	6.39	0.00	0.00	0.00	0.62	0.25
5% LSD VARIETY MEANS (*****=NS)		36.96%	3.22%	1.98%	30.47%	0.00%	0.00%	0.00%	2.71%	35.13%
		1331.06	1.56	2.56	18.27	0.00	0.00	0.00	1.77	0.73
C O R R E L A T I O N S										
		{+ - PROR=.05      +- - PROR=.01}								
YIELD	KG/HA	1.00	-0.34++	-0.31+	-0.13	0.00	0.00	0.00	-0.28+	-0.15
DAYS TO FLOWER		-0.34++	1.00	0.68++	0.35++	0.00	0.00	0.00	0.91++	0.72++
DAYS TO MATURITY		-0.31+	0.68++	1.00	0.11	0.00	0.00	0.00	0.50++	0.44++
NODULE NUMBER 1		-0.13	0.35++	0.11	1.00	0.00	0.00	0.00	0.39++	0.19
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT		-0.29+	0.91++	0.50++	0.39++	0.00	0.00	0.00	1.00	0.75++
LOGGING		-0.15	0.72++	0.44++	0.19	0.00	0.00	0.00	0.75++	1.00
SHATTER		-0.22	-0.20	-0.16	-0.13	0.00	0.00	0.00	-0.20	-0.18
HARVEST		0.01	-0.05	-0.01	0.17	0.00	0.00	0.00	-0.05	-0.05
PODS PER PLANT		-0.26+	0.11	0.12	-0.19	0.00	0.00	0.00	0.12	0.16
100 SEED WEIGHT		0.06	0.18	0.30+	0.02	0.00	0.00	0.00	0.18	0.09
QUALITY OF SEED		0.03	0.41++	0.25+	0.22	0.00	0.00	0.00	0.34++	0.29
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 152 EXPERIMENT 346 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
10	COLUMBUS	1.00	191.75	51.25	16.63	1.50
13	WILLIAMS	1.00	197.00	41.00	16.43	1.25
9	FORREST	1.50	197.75	44.25	14.35	1.25
11	CLARK 63	1.00	198.75	49.50	19.98	1.25
7	DAVIS	1.25	194.50	57.00	20.45	1.00
14	CALLAND	1.00	194.75	38.00	16.73	1.50
8	TRACY	1.25	191.25	49.00	16.18	2.00
5	PICKETT 71	1.50	197.50	56.50	14.63	2.00
15	SEMMS	1.75	196.00	59.00	15.88	1.00
2	HAMPTON 266A	1.25	197.50	40.50	16.33	1.25
3	HARDEE	1.75	198.00	66.50	13.78	1.00
6	BOSSIER	1.00	194.00	50.75	20.00	1.00
12	WOODHURTH	1.75	195.75	54.75	12.85	1.25
1	JUPITER	1.75	192.75	60.50	19.88	1.75
4	IMPROVED PELICAN	1.00	196.50	51.50	15.85	2.25
GRAND MEAN						
		1.28	195.65	51.33	16.66	1.42
STANDARD ERROR OF A VARIETY MEAN		0.28	2.09	1.48	0.72	0.27
COEFFICIENT OF VARIATION		43.02%	2.13%	5.77%	8.61%	38.76%
5% ISD VARIETY MEANS (*****=NS) *****						
C O R R E L A T I O N S						
(+ - PROR=.05      +- - PROR=.01)						
YIELD	KG/HA	-0.22	0.01	-0.26+	0.06	0.00
DAYS TO FLOWER		-0.20	-0.05	0.11	0.18	0.00
DAYS TO MATURITY		-0.13	-0.16	0.12	0.30+	0.00
NODULE NUMBER 1		-0.13	0.17	-0.19	0.02	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
LOGGING		-0.20	-0.05	0.12	0.18	0.00
SHATTER		-0.18	-0.05	0.16	0.09	0.00
PLANTS		1.00	-0.13	0.23	-0.19	0.00
HARVEST		-0.13	1.00	-0.03	-0.15	0.00
PODS PER PLANT		0.23	-0.03	1.00	-0.12	0.00
100 SEED WEIGHT		-0.19	-0.03	-0.06	0.00	0.00
QUALITY OF SEED		-0.15	-0.15	-0.06	1.00	0.00
DISEASE I		0.00	-0.12	-0.06	-0.13	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	1.00	0.00
		0.00	0.00	0.00	0.00	1.00

TABLE 153 EXPERIMENT 320 YEAR 1975

REGION - MESOAMERICA COUNTRY - MARTINIQUE  
 SITE - IE LAVENTIN ELEVATION - 10 M  
 LATITUDE - 14 DEG. 37 MIN. N LONGITUDE - 60 DEG. 58 MIN. W  
 COOPERATOR - DALY DATE HARVESTED - JULY, 1975  
 DATE PLANTED - APRIL 10, 1975  
 SOIL TYPE - CLAY, PH 5.0  
 FERTILIZER USED (KG/HA) - N 60.0, P 80.0  
 AMOUNT OF MOISTURE - 557 MM  
 NUMBER OF IRRIGATIONS - 17 (125 MM)

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	2153.76	35.00	119.00	15.50	52.00	0.05	0.29	75.00	4.00
6	BOSSIER	1747.85	33.75	111.00	22.00	72.25	0.05	0.51	80.00	1.00
3	HARDEE	1634.08	30.00	119.00	1.50	13.25	0.03	0.10	85.00	2.00
14	CALLAND	1633.66	22.00	86.00	42.00	144.25	0.19	1.31	76.25	2.00
1	JUPITER	1529.06	35.00	134.00	4.50	72.50	0.03	0.36	91.25	2.75
11	CLARK 63	1468.21	22.00	93.00	29.50	76.25	0.13	0.71	75.00	3.00
10	COLUMBUS	1396.95	23.25	86.00	33.00	89.00	0.17	1.00	81.25	2.00
12	WOODHORTH	1356.10	22.00	86.00	23.50	41.50	0.15	0.34	65.00	2.00
7	DAVIS	1174.82	27.75	107.00	24.00	39.25	0.08	0.27	65.00	1.00
9	FORREST	1069.80	27.00	86.00	3.75	14.00	0.01	0.23	57.50	1.00
13	WILLIAMS	1046.04	22.00	86.00	25.75	73.50	0.18	0.57	78.75	2.00
5	COBB	1036.46	27.00	111.00	57.75	83.00	0.18	0.68	55.00	1.00
15	SEMME	1016.04	27.00	86.00	33.75	81.50	0.08	0.32	61.25	1.00
2	HAMPTON 266A	951.02	27.00	111.00	63.25	157.50	0.24	0.87	63.75	1.00
8	TRACY	906.01	24.50	86.00	14.25	40.25	0.08	0.35	46.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=-.05 +- - PROB=-.01)										
YIELD	KG/HA	1.00	0.37++	0.33++	-0.29+	-0.12	-0.29+	-0.07	0.47++	0.56++
DAYS TO FLOWER	1.00	0.37++	1.00	0.82++	-0.30+	-0.16	-0.47++	-0.32+	0.30+	0.19
DAYS TO MATURITY	0.33++	0.82++	1.00	1.00	-0.12	-0.03	-0.24	-0.21	0.42++	0.28+
NODULE NUMBER 1	-0.29+	-0.30+	-0.12	1.00	0.68++	0.84++	0.84++	0.63++	-0.18	-0.23
NODULE NUMBER 2	-0.12	-0.16	-0.03	0.68++	1.00	1.00	0.67++	0.85++	-0.05	-0.07
NODULE WEIGHT 1	-0.29+	-0.47++	-0.24	0.84++	0.67++	0.67++	1.00	1.00	-0.03	-0.07
NODULE WEIGHT 2	-0.07	-0.32+	-0.21	0.63++	0.85++	0.85++	0.71++	1.00	0.17	0.01
PLANT HEIGHT	0.47++	0.30+	0.42++	-0.18	0.12	0.12	-0.03	0.17	1.00	0.54++
LODGING	0.56++	0.19	0.28+	-0.23	-0.05	-0.07	-0.07	0.01	0.54++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	-0.58++	-0.78++	-0.70++	0.36++	0.13	0.40++	0.40++	0.24	-0.43++	-0.63++
PODS PER PLANT	0.67++	0.61++	0.54++	-0.33++	-0.17	-0.41++	-0.22	-0.21	0.39++	0.47++
100 SEED WEIGHT	-0.16	0.18	0.42++	0.22	0.36++	0.23	-0.06	0.05	0.18	-0.02
QUALITY OF SEED	0.15	0.54++	0.58++	0.14	0.23	0.23	0.00	0.00	0.04	0.21
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 153 EXPERIMENT 320 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
4	IMPROVED PELICAN	1.00	112.75	69.10	17.75	4.25	44.9	22.5
6	BOSSIER	1.00	173.00	46.72	19.75	2.50	44.0	22.8
3	HARDEE	1.00	175.50	55.12	20.50	2.50	42.0	23.6
14	CALLAND	1.00	204.75	39.80	22.75	3.00	42.5	22.6
1	JUPIER	1.00	129.50	49.15	32.25	3.75	47.1	23.2
11	CLARK 63	1.00	189.50	33.72	19.75	2.00	41.2	24.3
10	COLUMBUS	1.00	200.25	36.20	20.00	1.00	43.0	24.4
12	WOODWORTH	1.00	196.50	31.67	19.25	1.00	38.8	26.2
7	DAVIS	1.00	189.00	43.80	19.50	1.75	41.9	24.1
9	FORREST	1.00	193.75	40.78	17.00	1.00	40.1	24.0
13	WILLIAMS	1.00	198.50	25.88	22.50	1.00	43.7	23.5
5	COBB	1.00	201.00	28.50	23.50	3.00	45.1	22.9
15	SEMME	1.00	193.00	30.47	22.25	3.00	45.3	22.0
2	HAMPTON 266A	1.00	194.75	32.50	28.75	3.75	43.9	26.0
8	TRACY	1.00	195.25	25.88	21.75	3.00	41.6	23.9
GRAND MEAN								
		1.00	183.13	39.29	21.82	2.43		
STANDARD ERROR OF A VARIETY MEAN		0.00	5.12	4.36	0.99	0.24		
COEFFICIENT OF VARIATION		0.00%	5.59%	22.20%	9.11%	19.92%		
5% LSD VARIETY MEANS (*****=NS)		0.00	14.63	12.46	2.84	0.69		
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.58++	0.67++	-0.16	0.15	0.00	0.00
DAYS TO FLOWER		0.00	-0.78++	0.61++	0.18	0.54++	0.00	0.00
DAYS TO MATURITY		0.00	-0.70++	0.54++	0.42++	0.58++	0.00	0.00
NODULE NUMBER 1		0.00	0.36++	-0.33++	0.22	0.14	0.00	0.00
NODULE NUMBER 2		0.00	0.13	-0.17	0.36++	0.23	0.00	0.00
NODULE HEIGHT 1		0.00	0.40++	-0.41++	0.22	-0.06	0.00	0.00
NODULE HEIGHT 2		0.00	0.24	-0.21	0.21	0.05	0.00	0.00
PLANT	HEIGHT	0.00	-0.43++	0.39++	0.18	0.04	0.00	0.00
LODGING		0.00	-0.63++	0.47++	-0.02	0.21	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.67++	-0.13	-0.50++	0.00	0.00
PODS PER	PLANT	0.00	-0.67++	1.00	-0.10	0.24	0.00	0.00
100 SEED	WEIGHT	0.00	-0.13	-0.10	1.00	0.44++	0.00	0.00
QUALITY	OF SEED	0.00	-0.50++	0.24	0.44++	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 154

EXPERIMENT 494

YEAR 1975

REGION - MESOAMERICA  
 SITE - MANAGUA  
 LATITUDE - 12 DEG. 33 MIN. N  
 COOPERATOR - BANCO CENTRAL DE NICARAGUA  
 DATE PLANTED - AUGUST 18, 1975  
 SOIL TYPE - SILT, PH 6.4  
 AMOUNT OF MOISTURE - 660 MM  
 LOCAL VARIETY - RICHARDSON

COUNTRY - NICARAGUA  
 ELEVATION - 60 M  
 LONGITUDE - 86 DEG. 59 MIN. W  
 DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CECSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LDCG
1	JUPITER	2920.17	31.25	111.50	80.00	135.00	1.45	7.00	1.45	7.00	71.37	0.00
15	RICHARDSON	2439.59	30.50	91.00	46.75	112.00	0.97	4.40	0.97	4.40	86.65	0.00
4	IMPROVED FELICAN	2093.75	30.00	93.25	79.00	110.50	0.82	3.13	0.82	3.13	89.15	0.00
10	COLUMBUS	2051.24	30.00	88.25	69.50	84.25	1.18	4.03	1.18	4.03	51.00	0.00
3	HARDEE	2004.57	30.00	93.25	98.00	151.75	1.80	5.40	1.80	5.40	30.50	0.00
14	CALLAND	1973.73	30.00	89.00	61.50	106.25	1.20	4.13	1.20	4.13	52.43	0.00
2	HAMPTON 266A	1919.55	30.75	98.25	156.50	107.50	2.13	2.35	2.13	2.35	31.18	0.00
7	DAVIS	1892.04	31.00	90.75	80.25	120.75	0.78	4.50	0.78	4.50	30.45	0.00
5	COBB	1884.54	30.00	100.75	44.75	84.00	0.87	1.90	0.87	1.90	33.18	0.00
13	WILLIAMS	1841.20	30.00	84.00	106.50	81.00	1.28	3.45	1.28	3.45	51.28	0.00
9	FORREST	1728.26	30.00	86.50	87.50	140.00	1.13	5.93	1.13	5.93	33.73	0.00
6	BOSSIER	1580.32	30.00	98.25	122.50	109.00	1.40	3.20	1.40	3.20	29.30	0.00
12	WOODWORTH	1330.27	30.50	84.00	75.25	39.00	1.43	1.03	1.43	1.03	46.00	0.00
8	TRACY	1260.67	30.00	85.75	102.75	54.25	1.80	2.40	1.80	2.40	30.35	0.00
11	CLARK 63	1241.50	30.00	84.00	73.50	57.25	1.13	2.48	1.13	2.48	43.28	0.00
GRAND MEAN												
1857.43												
STANDARD ERROR OF A VARIETY MEAN												
175.79												
COEFFICIENT OF VARIATION												
18.93%												
5% LSD VARIETY MEANS (*****=NS)												
501.72 *****												
C O R R E L A T I O N S												
(+ - PROB=.05      +- - PROB=.01)												
YIELD	KG/HA	1.00	0.28+	0.67++	-0.06	0.19	-0.10	0.28+	-0.10	0.28+	0.47++	0.00
DAYS TO FLOWER	1.00	0.28+	0.17	0.67++	0.02	-0.12	0.02	0.06	0.02	0.06	0.09	0.00
DAYS TO MATURITY	0.67++	0.17	1.00	0.01	0.01	0.21	-0.04	0.20	-0.04	0.20	0.17	0.00
NODULE NUMBER 1	-0.06	0.02	0.01	1.00	1.00	-0.00	0.77++	-0.07	0.77++	-0.07	-0.29+	0.00
NODULE NUMBER 2	-0.19	-0.12	0.21	-0.00	-0.00	1.00	0.05	0.75++	0.05	0.75++	0.05	0.00
NODULE WEIGHT 1	-0.10	0.02	-0.04	0.77++	0.05	0.05	1.00	0.02	1.00	0.02	-0.24	0.00
NODULE WEIGHT 2	0.28+	0.06	0.20	-0.07	-0.07	0.75++	0.02	1.00	0.02	1.00	0.14	0.00
PLANT HEIGHT	0.47++	0.09	0.17	-0.29+	-0.29+	0.05	-0.24	0.14	-0.24	0.14	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.30+	-0.13	0.07	0.21	-0.16	-0.04	-0.05	-0.05	-0.04	-0.05	-0.12	0.00
POIS PER PLANT	0.28+	0.15	0.07	-0.28+	0.30+	0.30+	-0.26+	0.22	-0.26+	0.22	0.59++	0.00
100 SEED WEIGHT	-0.04	0.05	0.34++	0.30+	0.04	0.04	0.02	-0.06	0.02	-0.06	-0.52++	0.00
QUALITY OF SLED	-0.24	-0.24	-0.33++	0.17	0.03	0.03	0.01	-0.07	0.01	-0.07	-0.76++	0.00
DISEASE I	-0.56++	-0.10	-0.29+	0.25	-0.21	-0.21	0.12	-0.31+	0.12	-0.31+	-0.82++	0.00
DISEASE II	-0.49++	-0.23	-0.56++	0.07	-0.16	-0.16	0.07	-0.11	0.07	-0.11	-0.61++	0.00
DISEASE III	0.12	-0.10	0.04	-0.04	0.05	0.05	-0.18	-0.06	-0.18	-0.06	0.56++	0.00



TABLE 154 EXPERIMENT 494 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	0.00	124.75	47.23	16.65	1.00	38.8	27.8
15	RICHARDSON	0.00	80.75	103.80	13.60	2.00	38.2	26.0
4	IMPROVED PELICAN	0.00	118.00	67.75	12.10	2.00	41.6	24.2
10	COLUMBUS	0.00	119.50	44.95	13.40	3.00	41.9	25.9
3	HARDEE	0.00	111.00	46.40	14.70	3.25	41.9	27.5
14	CALLAND	0.00	117.00	43.98	16.45	3.25	40.6	22.7
2	HAMPTON 266A	0.00	118.00	43.78	17.90	3.25	37.4	27.7
7	DAVIS	0.00	116.25	55.38	15.60	4.00	41.9	27.1
5	COBB	0.00	113.25	41.65	17.50	3.25	36.7	27.4
13	WILLIAMS	0.00	127.50	31.83	16.70	3.00	41.4	26.3
9	FORREST	0.00	125.00	47.98	14.10	5.00	41.9	26.0
6	BOSSIER	0.00	110.50	38.50	19.60	4.00	45.1	24.6
12	WOODWORTH	0.00	101.50	30.13	14.25	3.00	38.4	27.4
8	TRACY	0.00	129.25	33.20	16.55	4.00	43.8	24.1
11	CLARK 63	0.00	90.50	34.10	14.60	3.00	39.7	27.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(* - PROB=.05    ** - PROB=.01)								
YIELD	KG/HA	0.00	0.30+	0.28+	-0.04	-0.49++	-0.56++	-0.49++
DAYS TO FLOWER		0.00	-0.13	0.15	0.05	-0.24	-0.10	0.12
DAYS TO MATURITY		0.00	0.07	0.07	0.34++	-0.33++	-0.29+	-0.23
NODULE NUMBER 1		0.00	0.21	-0.28+	0.30+	0.17	0.25	-0.56++
NODULE NUMBER 2		0.00	-0.16	0.30+	0.04	0.03	0.07	0.07
NODULE WEIGHT 1		0.00	-0.04	-0.26+	0.22	0.01	-0.21	-0.16
NODULE WEIGHT 2		0.00	-0.05	0.22	-0.06	-0.07	0.12	0.07
PLANT HEIGHT		0.00	-0.12	0.59++	-0.52++	-0.76++	-0.31+	-0.11
LODGING		0.00	0.00	0.00	0.00	0.00	-0.61++	-0.66++
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	1.00	-0.33++	0.12	0.00	0.09	0.05
100 SEED WEIGHT		0.00	-0.33++	1.00	-0.41++	-0.32+	-0.61++	-0.46++
QUALITY OF SEED		0.00	0.12	-0.41++	1.00	0.23	0.49++	0.28+
DISEASE I		0.00	0.12	-0.32+	0.23	1.00	0.74++	-0.47++
DISEASE II		0.00	0.09	-0.61++	0.49++	0.74++	1.00	-0.32+
DISEASE III		0.00	0.04	-0.46++	-0.06	0.70++	0.56++	-0.44++
DISEASE		0.00	0.05	0.28+	-0.47++	-0.32+	-0.44++	1.00



TABLE 155

EXPERIMENT 496

YEAR 1975

REGION - Mesoamerica  
 SITE - NAGARCTE  
 LATITUDE - 12 DEG. 18 MIN. N  
 CCOPERATOR - BANCO CENTRAL DE NICARAGUA  
 DATE PLANTED - AUGUST 27, 1975  
 SCIL TYPE - SILT  
 DATE HARVESTED - NOVEMBER, 1975  
 AMOUNT CF NCISTURE - 138C %M  
 LOCAL VARIETY - RICHARDSON

CCOUNTRY - NICARAGUA

ELEVATION - 40 M

LONGITUDE - 86 DEG. 40 MIN. W

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
15	RICHARDSON	1895.80	21.00	93.00	0.00	0.00	0.00	0.00	59.75	1.50
1	JUPITER	1479.46	24.00	100.00	0.00	0.00	0.00	0.00	45.45	1.00
13	WILLIAMS	1444.46	21.00	86.50	0.00	0.00	0.00	0.00	36.05	1.50
3	HARDEE	1345.27	23.00	90.75	0.00	0.00	0.00	0.00	26.63	1.25
4	IMPERVEL FELICAN	1121.47	21.75	90.00	0.00	0.00	0.00	0.00	57.43	1.50
10	COLUMBUS	1023.12	21.00	83.00	0.00	0.00	0.00	0.00	38.55	1.00
9	FORREST	967.28	23.00	83.00	0.00	0.00	0.00	0.00	26.85	1.00
7	DAVIS	919.35	23.00	84.75	0.00	0.00	0.00	0.00	24.65	1.25
8	TRACY	889.76	21.00	83.00	0.00	0.00	0.00	0.00	27.40	1.00
5	COBB	878.93	21.00	86.50	0.00	0.00	0.00	0.00	26.65	1.00
6	ROSSIER	807.24	21.00	83.00	0.00	0.00	0.00	0.00	23.35	1.00
2	HAMPTON 266A	789.32	21.00	86.50	0.00	0.00	0.00	0.00	24.60	1.25
12	WOODWORTH	728.48	21.00	83.00	0.00	0.00	0.00	0.00	33.55	1.75
11	CLARK 63	589.70	21.00	83.00	0.00	0.00	0.00	0.00	32.53	1.25
14	CALLAND	546.36	21.00	83.00	0.00	0.00	0.00	0.00	31.63	1.25
GRAND MEAN										
		1028.40	21.65	86.60	0.00	0.00	0.00	0.00	34.34	1.23
STANDARD ERROR OF A VARIETY MEAN										
		171.43	0.06	1.03	0.00	0.00	0.00	0.00	2.91	0.22
COEFFICIENT OF VARIATION										
		33.34%	0.60%	2.37%	0.00%	0.00%	0.00%	0.00%	16.93%	36.19%
5% LSD VARIETY MEANS (*****=NS)										
		489.28	0.18	2.93	0.00	0.00	0.00	0.00	8.29	*****
C C R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.60	0.24	0.64++	0.00	0.00	0.00	0.00	0.56++	0.23
DAYS TO FLOWER		0.24	1.00	0.52++	0.00	0.00	0.00	0.00	0.01	-0.11
DAYS TO MATURITY		0.64++	0.52++	1.00	0.00	0.00	0.00	0.00	0.52++	0.03
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.56++	0.01	0.52++	0.00	0.00	0.00	1.00	0.00	0.31+
LCDGING		0.23	-0.11	0.03	0.00	0.00	0.00	0.00	1.00	0.31+
SHATTIER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.13	-0.09	-0.16	0.00	0.00	0.00	0.00	-0.03	-0.14
PLANTS		0.68++	0.18	0.59++	0.00	0.00	0.00	0.00	0.41++	0.10
FOES PER		0.11	0.15	0.18	0.00	0.00	0.00	0.00	-0.18	-0.07
10C SEED		-0.19	-0.10	-0.33+	0.00	0.00	0.00	0.00	-0.41++	0.23
QUALITY		-0.51++	-0.21	-0.68++	0.00	0.00	0.00	0.00	-0.77++	-0.05
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 155 EXPERIMENT 496 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CFCSS	SEATTLE	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
15	RICHARDSON	1.00	109.00	62.00	12.50	3.00	35.7	27.0
1	JUPITER	1.00	95.75	32.28	16.10	3.00	36.8	27.8
13	WILLIAMS	1.00	126.25	19.63	14.50	5.00	40.6	27.2
3	HARDEE	1.00	112.25	47.03	12.50	5.00	36.4	28.1
4	IMPROVED PELICAN	1.00	131.75	23.28	8.60	4.00	37.9	26.2
10	COLUMBUS	1.00	125.25	21.50	12.70	3.00	39.8	27.4
9	FORREST	1.00	132.50	22.15	12.45	4.00	42.6	24.3
7	DAVIS	1.00	120.75	22.63	12.00	4.00	37.7	25.6
8	TRACY	1.00	155.50	18.98	14.30	4.00	39.4	25.3
5	COBB	1.00	126.25	30.35	11.00	4.00	39.0	24.7
6	BOSSIER	1.00	126.25	22.10	12.50	4.00	39.6	27.4
2	HAMPTON 266A	1.00	102.50	22.35	13.60	4.00	40.4	27.7
12	WOODWORTH	1.00	95.50	18.18	13.70	5.00	40.3	26.0
11	CLARK 63	1.00	110.50	18.55	13.40	4.00	36.9	29.8
14	CALLAND	1.00	115.50	13.10	11.80	4.00	41.2	25.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C C R R E L A T I O N S								
(+ - PROB=-.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.13	0.68++	0.11	-0.19	-0.51++	0.00
DAYS TO FLOWER	0.00	0.00	-0.09	0.18	0.15	-0.10	-0.21	0.00
DAYS TO MATURITY	0.00	0.00	-0.16	0.59++	0.18	-0.33+	-0.68++	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT	0.00	0.00	-0.03	0.41++	-0.18	-0.41++	-0.77++	0.00
LCDGING	0.00	0.00	-0.14	0.10	-0.07	0.23	-0.05	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.00	0.00	1.00	-0.07	-0.22	0.02	0.16	0.00
PODS PER PLANT	0.00	0.00	-0.07	1.00	-0.01	-0.22	-0.55++	0.00
100 SEED WEIGHT	0.00	0.00	-0.22	-0.01	1.00	-0.04	0.03	0.00
QUALITY OF SEED	0.00	0.00	0.02	-0.22	-0.04	1.00	0.67++	0.00
DISEASE I	0.00	0.00	0.16	-0.55++	0.03	0.67++	1.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 156

EXPERIMENT 495

YEAR 1975

REGION - MESOAMERICA  
 SITE - POSOLTEGA  
 LATITUDE - 12 DEG. 33 MIN. N  
 COOPERATORS - GUSTAVO ABDALAH, MAURICIO OCANA  
 DATE PLANTED - AUGUST 21, 1975  
 SOIL TYPE - SAND, PH 6.2  
 AMOUNT OF MOISTURE - 1473 MM  
 LOCAL VARIETY - RICHARDSON

COUNTRY - NICARAGUA

ELEVATION - 60 M

LONGITUDE - 86 DEG. 59 MIN. W

DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
1	JUPITER	1927.47	46.00	118.50	250.00	270.25	1.65	3.34	58.45	1.25
15	RICHARDSON	1744.93	39.00	113.75	158.50	278.50	1.41	3.76	53.15	1.25
4	IMPROVED FELICAN	1678.67	39.00	109.25	163.25	249.25	1.21	2.27	53.05	1.00
13	WILLIAMS	1163.15	27.00	87.00	105.00	266.75	0.42	1.91	30.00	1.50
10	COLUMBUS	1051.88	27.00	95.00	99.75	267.00	0.53	2.19	32.40	1.25
8	TRACY	1023.95	27.00	93.25	98.25	188.50	0.57	1.89	29.20	1.00
7	DAVIS	899.35	31.25	115.50	118.25	207.50	0.68	2.50	27.95	1.00
14	CALLAND	833.08	27.00	91.75	104.25	143.00	0.38	1.83	35.15	1.50
11	CLARK 63	777.66	28.25	100.75	125.00	250.50	0.52	2.16	29.25	1.50
6	BOSSIER	726.81	27.00	119.00	91.25	195.00	0.46	2.25	31.50	1.25
2	HAMPTON 266A	664.30	28.00	117.25	96.50	212.75	0.44	1.84	26.00	1.25
9	FORREST	660.55	31.25	118.25	95.75	222.25	0.47	2.38	30.75	1.00
12	WOODWORTH	625.96	27.00	87.00	78.25	184.75	0.35	1.42	27.15	1.75
3	HARDEE	556.78	35.75	119.00	120.50	225.00	1.11	2.71	28.15	1.00
5	COBB	376.74	28.00	119.00	90.00	145.25	0.42	1.90	30.05	1.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****NS)										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****NS)										

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TABLE 156 EXPEFIMENT 495 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	207.50	24.30	17.20	4.75	41.6	24.8
15	RICHARDSON	1.00	189.25	16.25	14.80	4.50	43.1	21.5
4	IMPROVED PELICAN	1.00	210.75	18.75	10.53	3.75	43.2	22.2
13	WILLIAMS	1.00	200.75	15.28	15.75	4.75	40.5	23.8
10	COLUMBUS	1.00	194.50	14.38	15.24	4.50	44.4	20.8
8	TRACY	1.00	203.50	12.85	17.19	5.00	44.9	20.9
7	DAVIS	1.00	187.25	13.83	17.90	4.50	41.3	24.7
14	CALLAND	1.00	190.50	13.28	14.76	5.00	41.7	19.5
11	CLARK 63	1.00	182.00	13.93	16.45	4.50	42.2	23.5
6	BOSSLER	1.00	187.50	11.20	17.65	4.75	45.8	21.6
2	HAMPTON 266A	1.00	203.00	11.70	19.13	4.75	41.2	25.4
9	PORREST	1.00	212.75	15.50	16.35	4.75	41.8	21.2
12	WOODWORTH	1.00	179.00	9.70	16.30	5.00	43.0	24.5
3	HARDEE	1.00	126.25	14.88	19.23	4.75	41.7	24.2
5	COBB	1.00	193.75	10.83	18.58	4.50	39.7	24.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C C R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.32+	0.56++	-0.47++	-0.14	0.00	0.00
DAYS TO FLOWER		0.00	0.02	0.59++	-0.16	-0.17	0.00	0.00
DAYS TO MATURITY		0.00	-0.03	0.10	0.37++	-0.02	0.00	0.00
NODULE NUMBER 1		0.00	0.16	0.51++	-0.11	-0.12	0.00	0.00
NODULE NUMBER 2		0.00	0.07	0.28+	-0.13	-0.24	0.00	0.00
NODULE WEIGHT 1		0.00	-0.02	0.57++	-0.10	-0.17	0.00	0.00
NODULE WEIGHT 2		0.00	0.02	0.46++	0.02	-0.19	0.00	0.00
PLANT HEIGHT		0.00	0.24	0.60++	-0.44++	-0.16	0.00	0.00
LOGGING		0.00	-0.08	-0.09	-0.16	0.01	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.17	-0.23	0.02	0.00	0.00
PODS PER PLANT		0.00	0.17	1.00	-0.19	-0.14	0.00	0.00
100 SEED WEIGHT		0.00	-0.23	-0.19	1.00	0.27+	0.00	0.00
QUALITY OF SEED		0.00	0.02	-0.14	0.27+	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 157 EXPERIMENT 616

YEAR 1975

REGION - MESOAMERICA  
 SITE - CHICHERRE  
 LATITUDE - 9 DEG. 10 MIN. N  
 COOPERATOR - GASPAR A. SILVERA  
 DATE PLANTED - AUGUST 22, 1975  
 SOIL TYPE - SAND 34%, SILT 14%, CLAY 52%, pH 5.6  
 FERTILIZERS USED (KG/HA) - N 32.8, P 65.5, K 32.8  
 AMOUNT OF MOISTURE - 1828 MM  
 LOCAL VARIETY - PAO 27403

COUNTRY - PANAMA  
 ELEVATION - 7 M

DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	3032.69	0.00	0.00	0.00	0.00	0.00	0.00	68.50	0.00
9	COLUMBUS	2196.27	0.00	0.00	0.00	0.00	0.00	0.00	55.25	0.00
4	IMPROVED PPLICAN	1869.12	0.00	0.00	0.00	0.00	0.00	0.00	89.75	0.00
10	CLARK 63	1621.57	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00
12	WILLIAMS	1600.32	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00
6	DAVIS	1598.65	0.00	0.00	0.00	0.00	0.00	0.00	32.00	0.00
13	PAO 27403	1563.65	0.00	0.00	0.00	0.00	0.00	0.00	100.75	0.00
11	WOODWORTH	1435.70	0.00	0.00	0.00	0.00	0.00	0.00	43.00	0.00
7	FORREST	1065.63	0.00	0.00	0.00	0.00	0.00	0.00	31.75	0.00
8	TPACY	880.59	0.00	0.00	0.00	0.00	0.00	0.00	31.00	0.00
2	HAMPTON 266A	795.58	0.00	0.00	0.00	0.00	0.00	0.00	28.75	0.00
3	HARDEE	636.38	0.00	0.00	0.00	0.00	0.00	0.00	29.00	0.00
5	ROSSIER	430.50	0.00	0.00	0.00	0.00	0.00	0.00	30.25	0.00
GRAND MEAN		1468.82	0.00	0.00	0.00	0.00	0.00	0.00	51.88	0.00
STANDARD ERROR OF A VARIETY MEAN		312.78	0.00	0.00	0.00	0.00	0.00	0.00	13.72	0.00
COEFFICIENT OF VARIATION		42.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	52.90%	0.00%
5% LSD VARIETY MEANS (*****=NS)		898.39	0.00	0.00	0.00	0.00	0.00	0.00	*****	0.00
C O R R E L A T I O N S										
		(+ - PROB=.05			++ - PROB=.01)					
YIELD	KG/HA	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53++	0.00
DAYS TO FLOWER		0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.53++	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PPR		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 157 EXPERIMENT 616 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	0.00	0.00	0.00	0.00	0.00
9	COLUMBUS	0.00	0.00	0.00	0.00	0.00
4	IMPROVED PELICAN	0.00	0.00	0.00	0.00	0.00
10	CLARK 63	0.00	0.00	0.00	0.00	0.00
12	WILLIAMS	0.00	0.00	0.00	0.00	0.00
6	DAVIS	0.00	0.00	0.00	0.00	0.00
13	FAO 27403	0.00	0.00	0.00	0.00	0.00
11	WOODWORTH	0.00	0.00	0.00	0.00	0.00
8	FORREST	0.00	0.00	0.00	0.00	0.00
7	TRACY	0.00	0.00	0.00	0.00	0.00
2	HAMPTON 266A	0.00	0.00	0.00	0.00	0.00
3	HARDEE	0.00	0.00	0.00	0.00	0.00
5	BOSSIER	0.00	0.00	0.00	0.00	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
C O R R E L A T I O N S						
(+ - PROB=.05      ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.00	0.00	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	1.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00

TABLE 158

EXPERIMENT 613

YEAR 1975

REGION - MESOAMERICA  
 SITE - RIO HATO  
 LATITUDE - 8 DEG. 22 MIN. N  
 COOPERATOR - GASPAR A. SILVERA  
 DATE PLANTED - AUGUST 28, 1975  
 SOIL TYPE - SAND 60%, SILT 40%, CLAY 30%, PH 6.7  
 FERTILIZER USED (KG/HA) - N 32.8, P 65.5, K 32.8  
 AMOUNT OF MOISTURE - 340 MM  
 NUMBER OF IRRIGATIONS - 1  
 LOCAL VARIETIES - CES-486, FAO 27403

COUNTRY - PANAMA  
 ELEVATION - 30 M  
 LONGITUDE - 80 DEG. 10 MIN. W  
 DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
1	JUPITER	3790.76	0.00	110.00	0.00	0.00	0.00	0.00	53.75	0.00
7	DAVIS	3153.96	0.00	91.25	0.00	0.00	0.00	0.00	28.50	0.00
14	CES-486	3059.36	0.00	104.00	0.00	0.00	0.00	0.00	75.75	0.00
3	HARDEE	2558.84	0.00	92.25	0.00	0.00	0.00	0.00	25.75	0.00
15	FAO 27403	2413.40	0.00	102.25	0.00	0.00	0.00	0.00	62.00	0.00
4	IMPROVED PELICAN	2346.72	0.00	103.00	0.00	0.00	0.00	0.00	59.25	0.00
2	HAMPTON 266A	2101.25	0.00	90.50	0.00	0.00	0.00	0.00	24.25	0.00
10	COLUMBUS	1873.23	0.00	93.50	0.00	0.00	0.00	0.00	34.00	0.00
8	TPACY	1799.94	0.00	90.00	0.00	0.00	0.00	0.00	23.00	0.00
9	FORREST	1709.09	0.00	92.50	0.00	0.00	0.00	0.00	28.75	0.00
13	WILLIAMS	1572.81	0.00	92.00	0.00	0.00	0.00	0.00	33.75	0.00
6	BOSSIER	1314.85	0.00	92.75	0.00	0.00	0.00	0.00	19.50	0.00
11	CLARK 63	916.43	0.00	92.25	0.00	0.00	0.00	0.00	24.00	0.00
12	WOODWORTH	720.14	0.00	90.75	0.00	0.00	0.00	0.00	28.25	0.00
5	CORB	580.53	0.00	90.75	0.00	0.00	0.00	0.00	19.00	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.00	0.60**	0.00	0.00	0.00	0.00	0.53**	0.00
DAYS TO FLOWER	0.00	0.60**	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.80**	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.53**	0.00	0.00	0.80**	0.00	0.00	0.00	0.00	1.00	0.00
LOGGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS HARVEST	0.50**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32*	0.00
100 SEED WEIGHT	0.29*	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.10	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 158 EXPERIMENT 613 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	0.00	174.00	0.00	22.50	0.00
7	DAVIS	0.00	180.25	0.00	18.50	0.00
14	CES-486	0.00	141.00	0.00	18.50	0.00
3	HARDEE	0.00	149.25	0.00	19.25	0.00
15	FAO 27403	0.00	146.75	0.00	11.75	0.00
4	IMPROVED PELICAN	0.00	203.50	0.00	13.75	0.00
2	HAMPTON 266A	0.00	177.00	0.00	20.00	0.00
10	COLUMBUS	0.00	173.00	0.00	17.50	0.00
8	TPACY	0.00	147.75	0.00	17.75	0.00
9	WOPRES	0.00	152.25	0.00	15.50	0.00
13	WILLIAMS	0.00	149.50	0.00	19.25	0.00
6	BOSSIER	0.00	125.75	0.00	15.75	0.00
11	CLARK 63	0.00	114.75	0.00	17.50	0.00
12	WOODWORTH	0.00	110.00	0.00	16.25	0.00
5	CORR	0.00	42.75	0.00	17.50	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	145.83	0.00	17.42	0.00
COEFFICIENT OF VARIATION		0.00	9.31	0.00	0.64	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	12.77%	0.00%	7.37%	0.00%
			26.61	0.00	1.83	0.00
C O R R E L A T I O N S						
YIELD KG/HA		0.00	0.50++	0.00	0.29+	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.34++	0.00	0.01	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.32+	0.00	0.00	0.00
LOGGING		0.00	0.00	0.00	-0.10	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	0.00	0.06	0.00
100 SEED WEIGHT		0.00	0.00	1.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	1.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00
					0.00	1.00

TABLE 159

EXPERIMENT 643

YEAR 1975

REGION - MESOAMERICA  
 SITE - PORT-OF-SPAIN  
 LATITUDE - 11 DEG. N  
 COOPERATOR - R. SALANDY  
 DATE PLANTED - JANUARY 6, 1976  
 SOIL TYPE - SANDY LOAM  
 FERTILIZER USED (KG/HA) - N 40.0, P 35.0, K 66.0  
 AMOUNT OF MOISTURE - 165 MM  
 SUBSTITUTE VARIETIES - JUPITER (CACP), IMPROVED PELICAN (CACP)

COUNTRY - TRINIDAD AND TOBAGO  
 ELEVATION - 6 M  
 LONGITUDE - 61 DEG. W

DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	JUPITER (CACP)	4132.49	41.75	101.00	0.00	0.00	0.00	0.00	63.30	3.50
1	JUPITER	4095.82	40.75	100.25	0.00	0.00	0.00	0.00	61.73	3.00
7	DAVIS	3753.25	32.00	95.25	0.00	0.00	0.00	0.00	31.23	1.00
3	HARDEE	3587.38	34.25	97.25	0.00	0.00	0.00	0.00	27.20	1.00
13	WILLIAMS	3419.85	26.00	91.75	0.00	0.00	0.00	0.00	37.68	2.00
15	IMPROVED PELICAN (CACP)	3310.66	41.00	94.00	0.00	0.00	0.00	0.00	47.88	2.00
10	COLUMBUS	3252.32	25.00	92.00	0.00	0.00	0.00	0.00	34.70	2.00
9	FORREST	3108.12	29.75	91.00	0.00	0.00	0.00	0.00	34.63	1.00
2	HAMPTON 266A	3043.94	29.00	92.50	0.00	0.00	0.00	0.00	25.90	1.00
4	IMPROVED PELICAN	2793.89	26.00	89.50	0.00	0.00	0.00	0.00	25.40	1.00
6	BOSSIER	2547.18	26.00	92.50	0.00	0.00	0.00	0.00	22.18	1.00
8	TRACY	2107.09	29.75	85.00	0.00	0.00	0.00	0.00	28.48	1.00
12	WOODWORTH	1755.35	26.00	85.00	0.00	0.00	0.00	0.00	32.68	2.00
11	CLARK 63	1599.49	26.00	93.50	0.00	0.00	0.00	0.00	27.33	2.25
5	COBB	1197.74	29.50	94.75	0.00	0.00	0.00	0.00	19.15	1.00
	GRAND MEAN	2913.64	30.85	93.02	0.00	0.00	0.00	0.00	34.63	1.65
	STANDARD ERROR OF A VARIETY MEAN	226.92	0.35	0.65	0.00	0.00	0.00	0.00	2.19	0.15
	COEFFICIENT OF VARIATION	15.58%	2.25%	1.40%	0.00%	0.00%	0.00%	0.00%	12.66%	17.66%
	5% LSD VARIETY MEANS (*****=NS)	648.55	0.99	1.86	0.00	0.00	0.00	0.00	6.27	0.42
C O R R E L A T I O N S										
	YIELD	1.00	0.55++	0.56++	0.00	0.00	0.00	0.00	0.64++	0.29+
	DAYS TO FLOWER	0.55++	1.00	0.67++	0.00	0.00	0.00	0.00	0.75++	0.49++
	DAYS TO MATURITY	0.56++	0.67++	1.00	0.00	0.00	0.00	0.00	0.51++	0.44++
	NODULE NUMBER 1	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
	PLANT	0.64++	0.75++	0.51++	0.00	0.00	0.00	0.00	1.00	0.76++
	LODGING	0.29+	0.49++	0.44++	0.00	0.00	0.00	0.00	0.76++	1.00
	SHATTER	-0.16	-0.16	0.02	0.00	0.00	0.00	0.00	-0.09	0.08
	HARVEST	0.67++	0.20	-0.02	0.00	0.00	0.00	0.00	0.35++	-0.01
	PLANTS PER PLANT	-0.02	0.24	0.20	0.00	0.00	0.00	0.00	0.08	0.24
	100 SEED WEIGHT	0.30+	0.14	0.40++	0.00	0.00	0.00	0.00	0.18	0.18
	QUALITY OF SEED	-0.13	-0.10	0.20	0.00	0.00	0.00	0.00	-0.09	0.07
	DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(+ - PROB=.05    ++ - PROB=.01)

TABLE 159 EXPERIMENT 643 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	JUPITER (CADP)	1.00	195.25	26.95	27.58	3.75
1	JUPITER	1.00	191.50	26.12	25.45	3.50
7	DAVIS	1.00	188.50	20.48	24.38	3.00
3	HARDER	1.00	173.25	33.10	23.73	3.50
13	WILLIAMS	1.00	213.50	18.95	25.55	2.75
15	IMPROVED PELICAN (CADP)	1.00	208.75	29.15	20.50	2.00
10	COLUPRUS	1.00	209.75	20.67	23.88	2.75
9	FORREST	1.00	202.25	27.70	21.50	2.75
2	HAMPTON 266A	1.00	193.50	20.00	27.10	3.00
4	IMPROVED PELICAN	1.00	215.50	20.97	24.00	3.25
6	BOSSIER	1.00	183.50	25.13	24.10	4.00
8	TRACY	1.00	199.50	20.35	24.20	2.75
12	WOODWORTH	1.00	135.75	29.40	21.90	3.75
11	CLARK 63	1.50	67.00	32.58	22.40	3.75
5	CORB	1.00	84.00	21.77	24.65	3.50
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.03	177.43	24.89	24.06	3.20
COEFFICIENT OF VARIATION		0.07	13.31	2.64	0.41	0.22
5% LSD VARIETY MEANS (*****=NS)		14.43%	15.00%	21.19%	3.44%	13.70%
		0.21	38.04	7.54	1.18	0.63
C O R R E L A T I O N S						
		(+ - PROF=.05    ++ - PROB=.01)				
YIELD	KG/HA	-0.16	0.67++	-0.02	0.30+	-0.13
DAYS TO	FLOWER	-0.16	0.20	0.24	0.14	-0.10
DAYS TO	MATURITY	0.02	-0.02	0.20	0.40++	0.00
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.09	0.35++	0.08	0.00	0.00
	LODGING	0.08	-0.01	0.24	0.18	-0.09
	SHATTER	1.00	-0.30+	0.14	0.07	0.00
PLANTS	HARVEST	-0.30+	1.00	-0.32+	-0.11	0.00
PODS PER	PLANT	0.14	-0.32+	1.00	0.14	-0.39++
100 SEED	WEIGHT	-0.11	0.14	-0.28+	-0.28+	0.00
QUALITY	OF SEED	0.23	-0.39++	0.27+	1.00	0.26+
DISEASE	I	0.00	0.00	0.00	0.00	1.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00
						1.00



TABLE 160

EXPERIMENT 306

YEAR 1975

REGION - MIDDLE EAST  
 SITE - KIRAJ  
 LATITUDE - 35 DEG. 48 MIN. N  
 COOPERATORS - M.C. AMIRSHAH, M. MOJTAHEDI  
 DATE PLANTED - MAY 11, 1975  
 SOIL TYPE - CLAY LOAM, PH 7.8  
 FERTILIZER USED (KG/HA) - N 80.0, P 100.0  
 AMOUNT OF MOISTURE - 130 MM  
 NUMBER OF IRRIGATIONS - 14

COUNTRY - IRAN  
 ELEVATION - 1300M  
 LONGITUDE - 51 DEG. E

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	AMSOY 71	4684.27	34.50	106.25	126.25	237.50	0.66	1.73	97.75	1.00
6	CORSOY	4567.58	34.50	110.00	148.50	257.50	0.88	2.93	86.50	2.00
8	WELLS	4353.79	36.25	110.25	91.75	245.00	1.00	2.85	80.00	2.50
7	BEESON	4282.11	35.25	110.25	87.75	109.50	0.64	1.30	89.50	2.00
4	HODGSON	3890.36	29.50	102.75	67.25	147.25	0.40	2.43	62.00	1.00
15	BONUS	3536.12	43.25	124.75	45.50	228.75	0.70	2.70	107.75	2.00
3	HARK	3500.70	30.00	102.25	33.25	93.25	0.20	1.67	86.25	1.00
12	WOODWORTH	3387.34	41.25	105.50	89.50	163.25	0.80	2.35	94.50	1.75
13	WILLIAMS	3314.00	42.00	109.00	123.75	248.75	0.97	2.93	99.50	3.00
2	SWIFT	3171.47	30.00	96.75	87.50	157.50	0.36	2.18	69.50	1.00
14	CALLAND	2998.52	38.00	110.50	41.50	197.00	0.72	3.18	101.00	3.00
11	CLARK 63	2504.67	43.25	129.00	136.00	300.00	1.80	4.70	105.75	2.00
1	ALTONA	2019.15	25.00	86.75	94.00	157.75	0.45	2.43	44.00	1.00
10	COLUMBUS	1608.65	44.75	122.00	138.25	226.25	1.68	3.70	112.25	4.00
9	FORREST	858.50	70.75	149.75	299.00	299.00	3.93	3.93	109.25	5.00
GRAND MEAN										
3245.15										
STANDARD ERROR OF A VARIETY MEAN										
229.46										
COEFFICIENT OF VARIATION										
14.14%										
5% LSD VARIETY MEANS (*****=NS)										
655.81										
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	-0.54++	-0.43++	-0.39++	-0.19	-0.61++	-0.51++	-0.17	-0.55++
DAYS TO FLOWER		1.00	0.92++	0.92++	0.66++	0.48++	0.91++	0.51++	0.71++	0.85++
DAYS TO MATURITY		0.92++	0.92++	1.00	0.56++	0.53++	0.84++	0.59++	0.76++	0.77++
NODULE NUMBER 1		-0.39++	0.66++	0.56++	1.00	0.66++	0.79++	0.39++	0.30+	0.55++
NODULE NUMBER 2		-0.19	0.48++	0.53++	0.66++	1.00	0.49++	0.71++	0.41++	0.43++
NODULE WEIGHT 1		-0.61++	0.91++	0.84++	0.79++	0.49++	1.00	0.58++	0.52++	0.80++
NODULE WEIGHT 2		-0.51++	0.51++	0.59++	0.39++	0.71++	0.59++	1.00	0.40++	0.54++
PLANT HEIGHT		-0.17	0.71++	0.76++	0.30+	0.41++	0.52++	0.40++	1.00	0.64++
LODGING		-0.55++	0.85++	0.77++	0.55++	0.43++	0.80++	0.54++	0.64++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.20	-0.29+	-0.36++	-0.13	-0.12	-0.27+	-0.30+	-0.49++	-0.40++
PODS PER PLANT		0.62++	-0.17	-0.05	-0.27+	0.07	-0.31+	-0.11	0.29+	-0.15
100 SEED WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 160 EXPERIMENT 306 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
5	AMSOY 71	1.00	186.25	57.50	0.00	0.00	41.1	20.5
6	CORSOY	1.00	200.75	57.00	0.00	0.00	43.7	19.3
8	WELLS	1.00	195.75	56.00	0.00	0.00	42.7	20.0
7	BEESON	1.00	208.00	54.50	0.00	0.00	43.3	20.1
4	HODGSON	1.00	177.25	43.00	0.00	0.00	43.2	20.3
15	BONUS	1.00	190.50	48.50	0.00	0.00	44.1	20.2
3	HARK	1.00	208.25	39.50	0.00	0.00	41.7	21.1
12	WOODWORTH	1.00	194.75	51.75	0.00	0.00	42.2	20.1
13	WILLIAMS	1.00	200.75	52.25	0.00	0.00	43.5	20.3
2	SWIFT	1.00	202.00	25.50	0.00	0.00	40.0	21.8
14	CALLAND	1.00	193.75	50.50	0.00	0.00	42.1	19.7
11	CLARK 63	1.00	187.75	47.25	0.00	0.00	41.1	20.5
1	ALTONA	1.00	252.25	20.00	0.00	0.00	44.6	16.5
10	COLUMBUS	1.00	93.50	36.50	0.00	0.00	42.1	20.0
9	FORREST	1.00	189.75	20.25	0.00	0.00	40.7	17.3
GRAND MPAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	192.08	44.00	0.00	0.00		
COEFFICIENT OF VARIATION		0.00	8.57	3.28	0.00	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	8.92%	14.91%	0.00%	0.00%		
		0.00	24.50	9.37	0.00	0.00		
C O R R E L A T I O N S								
		(+ - PROB=.05			+ - PROB=.01)			
YIELD	KG/HA	0.00	0.20	0.62++	0.00	0.00	0.00	0.00
DAYS TO	FLOWER	0.00	-0.29+	-0.17	0.00	0.00	0.00	0.00
DAYS TO	MATURITY	0.00	-0.36++	-0.05	0.00	0.00	0.00	0.00
NODULE	NUMBER 1	0.00	-0.13	-0.27+	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	-0.12	0.07	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	-0.27+	-0.31+	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	-0.30+	-0.11	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	-0.49++	0.29+	0.00	0.00	0.00	0.00
	LOGGING	0.00	-0.40++	-0.15	0.00	0.00	0.00	0.00
	SHATTER	1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.16	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	-0.16	1.00	0.00	0.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	1.00	0.00	0.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 161 EXPERIMENT 311 YEAR 1975

REGION - MIDDLE EAST COUNTRY - IRAN  
 SITE - REZAIYEH ELEVATION - 1300 M  
 LATITUDE - 37 DEG. N LONGITUDE - 45 DEG. E  
 COOPERATORS - J. CARAPETIAN, A. MOZAFAR  
 DATE PLANTED - MAY 24, 1975 DATE HARVESTED - SEPTEMBER, 1975  
 SOIL TYPE - SAND 5.3%, SILT 37.9%, CLAY 56.8%, PH 8.0  
 FERTILIZER USED (KG/HA) - N 22.0, P 20.0, K 41.0  
 AMOUNT OF MOISTURE - 801 MM  
 NUMBER OF IRRIGATIONS - 11 (745 MM)

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
11	WOODWORTH	2885.16	49.00	125.50	70.00	82.50	0.50	1.95	84.75	1.25
7	BEESON	2749.72	38.50	122.25	90.00	117.50	0.71	1.55	83.25	1.50
12	WILLIAMS	2713.88	49.00	126.00	110.00	200.00	0.87	5.27	88.00	2.50
8	WELLS	2583.02	38.00	122.25	190.00	262.50	1.30	2.88	80.00	1.00
14	BONUS	2544.68	49.00	129.00	75.00	127.50	0.82	3.35	98.25	1.75
5	AMSOY 71	2465.49	39.50	125.50	205.00	255.00	1.14	2.33	85.00	1.50
13	CALLAND	2463.83	51.75	132.50	80.00	222.50	1.10	4.80	88.75	1.75
10	CLARK 63	2449.66	49.00	132.50	72.50	305.00	0.62	8.35	93.50	2.00
9	COLUMBUS	2181.27	60.00	148.00	210.00	350.00	3.83	8.50	122.50	3.25
6	CORSOY	2060.41	40.00	105.00	235.00	345.00	1.58	4.75	73.25	1.00
4	HODGSON	2029.57	37.00	105.00	125.00	190.00	0.86	2.73	67.25	1.00
3	HARK	1968.31	38.00	113.00	75.00	77.50	0.47	1.33	77.25	1.00
2	SWIFT	1816.20	39.00	97.00	155.00	95.00	1.03	1.45	66.25	1.00
1	ALTONA	1525.72	32.25	89.50	285.00	157.50	0.54	2.60	56.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.39**	0.61**	-0.25	-0.02	-0.07	0.06	0.50**	0.36**
DAYS TO FLOWER	1.00	0.39**	1.00	0.83**	-0.23	0.13	0.29*	0.37**	0.80**	0.70**
DAYS TO MATURITY	0.61**	0.83**	1.00	1.00	-0.23	0.12	0.26*	0.30**	0.87**	0.63**
MODULE NUMBER 1	-0.25	-0.23	-0.23	1.00	0.53**	0.67**	0.44**	0.44**	-0.20	-0.12
MODULE NUMBER 2	-0.02	0.13	0.12	0.53**	1.00	0.44**	0.44**	0.83**	0.01	-0.01
MODULE WEIGHT 1	-0.07	0.29*	0.26*	0.67**	0.44**	0.83**	1.00	0.51**	0.33*	0.28*
MODULE WEIGHT 2	0.06	0.37**	0.30*	0.44**	0.44**	0.83**	0.51**	1.00	0.18	0.18
PLANT HEIGHT	0.50**	0.80**	0.87**	-0.20	0.01	0.01	0.33*	0.18	1.00	0.77**
LCDGING	0.36**	0.70**	0.63**	-0.12	-0.01	0.01	0.28*	0.18	0.77**	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS PER PLANT	-0.13	0.14	0.09	0.12	0.24	0.30*	0.00	0.23	0.21	0.21
100 SEED WEIGHT	0.17	0.11	0.09	-0.03	0.09	0.10	0.10	0.10	0.27*	0.10
QUALITY OF SEED	0.76**	0.27*	0.47**	-0.23	-0.05	-0.07	-0.07	0.03	0.38**	0.31*
DISEASE I	-0.55**	-0.39**	-0.64**	0.10	-0.12	-0.16	-0.16	-0.14	-0.50**	-0.15
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 161 EXPERIMENT 311 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
11	WOODWORTH	1.00	189.75	31.00	14.60	1.50	33.9	21.7
7	BEESON	1.00	199.25	24.25	17.75	2.00	36.5	20.4
12	WILLIAMS	1.00	190.25	24.50	15.75	2.00	35.5	20.5
8	WELLS	1.00	181.25	26.50	14.53	1.00	36.3	21.6
14	BONUS	1.00	188.00	26.00	15.15	1.00	37.4	21.8
5	AMSOY 71	1.00	172.75	20.00	14.83	1.00	32.5	21.8
13	CALLAND	1.00	180.25	18.00	16.63	1.25	35.2	22.0
10	CLARK 63	1.00	190.75	23.25	13.95	1.75	34.6	21.3
9	COLUMBUS	1.00	211.75	34.25	14.08	1.75	39.0	19.0
6	CORSOY	1.00	190.25	29.00	13.65	2.00	34.2	22.5
4	HODGSON	1.00	192.00	22.25	13.88	3.00	34.1	23.9
3	HARK	1.00	198.50	28.25	13.88	2.00	35.2	22.2
2	SWIFT	1.00	186.75	22.50	13.13	3.00	34.0	22.8
1	ALTONA	1.00	188.00	25.50	12.58	3.75	38.8	20.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	189.96	25.38	14.60	1.93		
COEFFICIENT OF VARIATION		0.00	6.19	3.40	0.30	0.34		
5% LSD VARIETY MEANS (*****NS)		0.00	17.70	*****	4.12%	35.09%		
C O R R E L A T I O N S								
					(+ - PROB=-.05		+ - PROB=-.01)	
YIELD	KG/HA	0.00	-0.13	C.17	0.76++	-0.55++	0.00	0.00
DAYS TO FLOWER		0.00	0.14	C.17	0.27+	-0.39++	0.00	0.00
DAYS TO MATURITY		0.00	0.09	0.11	0.47++	-0.64++	0.00	0.00
NODULE NUMBER 1		0.00	0.12	-0.03	-0.23	0.10	0.00	0.00
NODULE NUMBER 2		0.00	0.24	0.09	-0.05	-0.12	0.00	0.00
NODULE HEIGHT 1		0.00	0.30+	0.10	-0.07	-0.16	0.00	0.00
NODULE HEIGHT 2		0.00	0.23	0.10	0.03	-0.14	0.00	0.00
PLANT	HEIGHT	0.00	0.21	C.27+	0.38++	-0.50++	0.00	0.00
LCDGING		0.00	0.21	C.10	0.31+	-0.15	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.10	-0.10	0.15	0.00	0.00
PLANTS	PER	0.00	0.10	1.00	-0.01	0.01	0.00	0.00
PODS PER	100 SEED	0.00	-0.10	-0.01	1.00	-0.38++	0.00	0.00
WEIGHT	OF SEED	0.00	0.15	0.01	-0.38++	1.00	0.00	0.00
QUALITY		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 162

EXPERIMENT 302

YEAR 1975

REGION - MIDDLE EAST  
 SITE - BET-DAGAN  
 COOPERATORS - B. REIG, W. LEHRER  
 DATE PLANTED - APRIL 17, 1975  
 SOIL TYPE - SAND 40%, SILT 26%, CLAY 35%, PH 7.6  
 FERTILIZER USED (KG/HA) - P 35.0, K 104.0  
 AMOUNT OF MOISTURE - 310 MM  
 NUMBER OF IRRIGATIONS - 7

COUNTRY - ISRAEL  
 ELEVATION - 80 M  
 LONGITUDE - 34 DEG. 50 MIN. E

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	4172.54	36.00	112.00	0.00	0.00	0.00	0.00	91.00	1.25
14	CALLAND	3804.18	36.00	122.25	0.00	0.00	0.00	0.00	101.75	1.75
10	COLUMBUS	3795.25	43.00	126.50	0.00	0.00	0.00	0.00	116.00	2.50
11	CLARK 63	3732.74	36.25	116.00	0.00	0.00	0.00	0.00	111.50	2.25
5	ANSOY 71	3566.20	36.00	102.00	0.00	0.00	0.00	0.00	97.25	1.00
15	BONUS	3482.70	38.00	121.00	0.00	0.00	0.00	0.00	115.75	1.50
3	HARK	3213.91	31.00	99.00	0.00	0.00	0.00	0.00	79.25	1.75
12	WOODWORTH	3133.98	36.00	110.00	0.00	0.00	0.00	0.00	70.50	1.00
7	BEESON	2991.55	32.00	103.00	0.00	0.00	0.00	0.00	86.00	1.25
6	CORSOY	2975.48	31.00	96.00	0.00	0.00	0.00	0.00	83.25	1.00
2	SWIFT	2888.85	31.00	81.00	0.00	0.00	0.00	0.00	62.75	1.00
8	WELLS	2730.35	32.00	95.00	0.00	0.00	0.00	0.00	82.00	1.00
4	HODGSON	2601.76	31.00	91.00	0.00	0.00	0.00	0.00	65.50	1.00
9	FORREST	2111.94	91.00	143.25	0.00	0.00	0.00	0.00	119.50	1.00
1	ALTONA	2015.95	30.00	77.00	0.00	0.00	0.00	0.00	50.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		3147.82	38.02	106.33	0.00	0.00	0.00	0.00	84.85	1.35
COEFFICIENT OF VARIATION		135.41	0.45	0.99	0.00	0.00	0.00	0.00	4.10	0.27
5% LSD VARIETY MEANS (*****=NS)		8.60%	2.38%	1.86%	0.00%	0.00%	0.00%	0.00%	9.23%	39.32%
		387.01	1.29	2.83	0.00	0.00	0.00	0.00	11.72	0.76
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.26+	0.32+	0.00	0.00	0.00	0.00	0.46++	0.47++
DAYS TO FLOWER		-0.26+	1.00	0.72++	0.00	0.00	0.00	0.00	0.52++	-0.03
DAYS TO MATURITY		0.32+	0.72++	1.00	0.00	0.00	0.00	0.00	0.84++	0.35++
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.46++	0.52++	0.84++	0.00	0.00	0.00	0.00	1.00	0.50++
LODGING		0.47++	-0.03	0.35++	0.00	0.00	0.00	0.00	0.50++	1.00
SHATTER		-0.11	-0.13	-0.39++	0.00	0.00	0.00	0.00	-0.31+	-0.14
HARVEST		0.00	-0.02	-0.23	0.00	0.00	0.00	0.00	-0.24	-0.11
PLANT		-0.07	0.21	0.16	0.00	0.00	0.00	0.00	0.31+	-0.02
PODS PER PLANT		0.62++	-0.23	0.33++	0.00	0.00	0.00	0.00	0.40++	0.40++
100 SEED WEIGHT		0.26+	0.02	0.37++	0.00	0.00	0.00	0.00	0.39++	0.40++
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 162 EXPERIMENT 302 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
13	WILLIAMS	1.00	142.50	29.75	18.20	1.50	40.5	22.2
14	CALLAND	1.00	134.00	33.75	19.88	2.75	39.2	22.4
10	COLUMBUS	1.00	140.00	41.00	16.78	2.25	41.9	21.1
11	CLARK 63	1.00	123.00	46.50	17.40	2.00	39.8	23.3
5	AMSOY 71	1.00	127.25	51.75	15.75	1.00	37.0	24.7
15	BONUS	1.00	139.00	41.75	18.23	2.75	42.5	22.1
3	HARK	1.00	132.50	57.25	15.60	1.25	39.6	23.8
12	WOODWORTH	1.00	144.25	34.25	15.15	1.25	37.6	24.9
7	BEESON	1.00	132.00	55.00	16.48	2.00	39.0	22.9
6	CORSOY	1.00	140.75	49.50	14.58	1.00	38.7	22.6
2	SWIFT	2.00	161.00	30.00	13.03	1.50	36.6	24.3
8	WELLS	1.00	136.50	56.25	13.70	1.75	38.4	23.5
4	HODGSON	1.00	148.50	48.25	16.48	1.50	37.3	25.3
9	FORREST	1.00	139.50	56.25	13.08	1.50	42.2	21.0
1	ALTONA	1.00	145.25	25.00	14.55	1.50	36.0	24.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.07	139.07	43.75	15.92	1.70		
COEFFICIENT OF VARIATION		0.00	7.78	5.01	0.56	0.25		
5% LSD VARIETY MEANS (*****=NS)		0.00%	11.19%	22.89%	7.04%	29.97%		
		0.00	*****	14.31	1.60	0.73		
C O R R E L A T I O N S								
					(+ - PROB=.05		+ + - PROB=.01)	
YIELD	KG/HA	-0.11	0.00	-0.07	0.62++	0.26+	0.00	0.00
DAYS TO	FLOWER	-0.13	-0.02	0.21	-0.23	0.02	0.00	0.00
DAYS TO	MATURITY	-0.39++	-0.23	0.16	0.33++	0.37++	0.00	0.00
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.31+	-0.24	0.31+	0.40++	0.39++	0.00	0.00
LODGING	HEIGHT	-0.14	-0.11	-0.02	0.40++	0.40++	0.00	0.00
SHATTER		1.00	0.36++	-0.27+	-0.34++	-0.08	0.00	0.00
PLANTS	HARVEST	0.36++	1.00	-0.27+	-0.15	-0.08	0.00	0.00
PODS PER	PLANT	-0.27+	-0.27+	1.00	-0.07	-0.21	0.00	0.00
100 SEED	WEIGHT	-0.34++	-0.15	-0.07	1.00	0.49++	0.00	0.00
QUALITY	OF SEED	-0.08	-0.08	-0.21	0.49++	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 163 EXPERIMENT 388 YEAR 1975

REGION - MIDDLE EAST COUNTRY - JORDAN  
 SITE - WADI DULAIL ELEVATION - 580 M  
 LATITUDE - 32 DEG. 10 MIN. N LONGITUDE - 36 DEG. 10 MIN. E  
 COOPERATORS - N. KATKHUDA, N. MUSA DATE HARVESTED - AUGUST, 1975  
 DATE PLANTED - MAY 5, 1975 SOIL TYPE - SAND 14%, SILT 62%, CLAY 24%, PH 7.9  
 FERTILIZER USED (KG/HA) - N 105.0, P 96.0  
 NUMBER OF IRRIGATIONS - 20

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	CORSOY	3571.50	62.25	98.00	0.00	0.00	0.00	0.00	66.25	0.00
9	FORREST	2976.25	77.50	151.75	0.00	0.00	0.00	0.00	88.75	0.00
15	SEMME	2976.25	63.50	119.25	0.00	0.00	0.00	0.00	67.50	0.00
8	WELLS	2857.20	63.00	110.25	0.00	0.00	0.00	0.00	55.00	0.00
4	HODGSON	2738.15	61.00	97.25	0.00	0.00	0.00	0.00	56.25	0.00
13	WILLIAMS	2738.15	58.75	119.00	0.00	0.00	0.00	0.00	65.00	0.00
12	WOODWORTH	2500.05	61.00	113.00	0.00	0.00	0.00	0.00	60.00	0.00
10	COLUMBUS	2261.95	62.25	122.00	0.00	0.00	0.00	0.00	70.00	0.00
3	HARK	2261.95	62.00	108.00	0.00	0.00	0.00	0.00	56.25	0.00
5	AMSOY 71	2142.90	61.25	110.00	0.00	0.00	0.00	0.00	63.75	0.00
7	BEESON	2023.85	62.50	115.00	0.00	0.00	0.00	0.00	51.25	0.00
14	CALLAND	2023.85	63.50	115.25	0.00	0.00	0.00	0.00	63.75	0.00
11	CLARK 63	1904.80	62.50	117.25	0.00	0.00	0.00	0.00	75.00	0.00
1	ALTONA	1785.75	57.00	80.00	0.00	0.00	0.00	0.00	46.25	0.00
2	SWIFT	1785.75	57.00	85.00	0.00	0.00	0.00	0.00	47.50	0.00
GRAND MEAN		2436.56	62.33	110.73	0.00	0.00	0.00	0.00	62.17	0.00
STANDARD ERROR OF A VARIETY MEAN		439.55	2.10	0.52	0.00	0.00	0.00	0.00	2.02	0.00
COEFFICIENT OF VARIATION		36.08%	6.74%	0.94%	0.00%	0.00%	0.00%	0.00%	6.51%	0.00%
5% LSD VARIETY MEANS (*****=NS)		*****	6.01	1.48	0.00	0.00	0.00	0.00	5.79	0.00
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.17	0.17	0.00	0.00	0.00	0.00	0.30+	0.00
DAYS TO FLOWER	0.17	0.17	1.00	0.65++	0.00	0.00	0.00	0.00	0.59++	0.00
DAYS TO MATURITY	0.17	0.17	0.65++	1.00	0.00	0.00	0.00	0.00	0.81++	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.30+	0.30+	0.59++	0.81++	0.00	0.00	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.16	0.16	0.44++	0.63++	0.00	0.00	0.00	0.00	0.60++	0.00
100 SEED WEIGHT	0.23	0.23	-0.10	-0.46++	0.00	0.00	0.00	0.00	-0.44++	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 163 EXPERIMENT 388 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	CORSOY	0.00	0.00	73.75	12.38	0.00
9	FORREST	0.00	0.00	140.00	10.63	0.00
15	SEMMES	0.00	0.00	71.25	11.00	0.00
8	WELLS	0.00	0.00	66.25	11.00	0.00
4	HODGSON	0.00	0.00	46.25	11.88	0.00
13	WILLIAMS	0.00	0.00	95.00	10.75	0.00
12	WOODWORTH	0.00	0.00	83.75	11.00	0.00
10	COLUMBUS	0.00	0.00	113.75	9.63	0.00
3	HARK	0.00	0.00	50.00	10.63	0.00
5	ANSOY 71	0.00	0.00	47.50	10.25	0.00
7	BEESON	0.00	0.00	41.25	11.75	0.00
14	CALLAND	0.00	0.00	75.00	11.25	0.00
11	CLARK 63	0.00	0.00	58.75	9.38	0.00
1	ALTONA	0.00	0.00	62.50	12.13	0.00
2	SWIFT	0.00	0.00	58.75	11.38	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
C O R R E L A T I O N S						
(+ - PROB=.05      +- - PROB=.01)						
YIELD	KG/HA	0.00	0.00	0.16	0.23	0.00
DAYS TO FLOWER		0.00	0.00	0.44++	-0.10	0.00
DAYS TO MATURITY		0.00	0.00	0.63++	-0.46++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.60++	-0.44++	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	-0.28+	-0.28+	0.00
QUALITY	OF SEED	0.00	0.00	0.00	1.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	1.00

TABLE 164 EXPERIMENT 409 YEAR 1975

REGION - MIDDLE EAST  
 SITE - BECA'A  
 LATITUDE - 33 DEG. 55 MIN. N  
 COORDINATOR - S. AEU SHAKRA  
 DATE PLANTED - MAY 18, 1975  
 SOIL TYPE - CLAY, PB 8.1  
 FERTILIZER USED (KG/HA) - N 50.0, P 50.0  
 COUNTRY - LEBANON  
 ELEVATION - 955 M  
 DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OF CRCS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICDGING
3	HARK	2896.41	59.00	141.00	217.00	383.75	2.62	5.47	2.62	5.47	112.75	1.00
2	SWIFT	2710.96	52.00	145.00	221.50	366.50	3.95	6.87	3.95	6.87	98.25	1.00
4	HCDGSON	2677.62	57.00	129.00	177.00	442.50	2.93	6.18	2.93	6.18	107.75	1.00
5	AMSOY 71	2604.69	56.00	124.00	221.00	303.75	2.38	5.79	2.38	5.79	108.00	1.00
1	AITONA	2600.52	56.00	142.00	343.00	479.50	4.12	6.42	4.12	6.42	102.25	1.00
6	CORSOY	2538.01	63.00	124.00	337.25	387.50	4.10	4.78	4.10	4.78	133.75	3.00
7	WELIS	2508.83	53.00	126.00	215.50	416.75	2.11	7.67	2.11	7.67	137.25	1.00
9	CLUMBUS	2419.23	52.00	126.00	226.75	346.75	1.67	6.44	1.67	6.44	89.00	1.00
10	CLARK 63	2227.53	52.00	126.00	204.25	378.75	1.80	5.82	1.80	5.82	91.00	1.00
12	WILLIAMS	2215.03	48.00	119.00	149.75	371.25	1.83	5.59	1.83	5.59	66.00	1.00
8	FORREST	2146.68	51.00	129.00	118.75	306.00	1.42	6.65	1.42	6.65	87.50	1.00
11	WOODWORTH	1908.71	44.00	119.00	177.75	287.50	1.57	5.28	1.57	5.28	75.25	1.00
14	BONUS	1802.86	19.00	101.00	116.25	205.00	1.76	4.57	1.76	4.57	54.25	1.00
13	CALLAND	1425.28	53.25	121.50	157.50	353.00	1.84	6.27	1.84	6.27	93.25	1.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN												
COEFFICIENT OF VARIATION												
5% ISL VARIETY MEANS (*****=NS)												
C C R E E L A T I O N S												
(+ - PROE=.05 ** - PFOB=.01)												
YIELD	KG/HA	1.00	0.47++	0.58++	0.38++	0.24	0.46++	0.14	0.48++	0.12	0.48++	0.12
DAYS TO FLOWER	1.00	0.47++	1.00	0.71++	0.44++	0.40++	0.41++	0.19	0.83++	0.33+	0.83++	0.33+
DAYS TO MATURITY	0.58++	0.71++	1.00	0.37++	0.37++	0.38++	0.53++	0.28+	0.58++	-0.07	0.58++	-0.07
NODULE NUMBER 1	0.38++	0.44++	0.37++	1.00	0.38++	0.38++	0.70++	-0.03	0.51++	0.41++	0.51++	0.41++
NODULE NUMBER 2	0.24	0.40++	0.36++	0.38++	0.38++	1.00	0.36++	0.58++	0.30+	0.30+	0.30+	0.06
NODULE WEIGHT 1	0.46++	0.41++	0.53++	0.70++	0.70++	0.36++	1.00	0.33	0.57++	0.44++	0.57++	0.44++
NODULE WEIGHT 2	0.14	0.19	0.28+	-0.03	0.58++	0.58++	0.03	1.00	0.11	-0.22	0.11	-0.22
PLANT HEIGHT	0.48++	0.83++	0.58++	0.51++	0.51++	0.33+	0.57++	0.11	1.00	0.53++	1.00	0.53++
ICDGING	0.12	0.33+	-0.07	0.41++	0.41++	0.06	0.44++	-0.22	0.53++	1.00	0.53++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT	0.29+	0.32+	0.09	0.42++	0.42++	0.20	0.45++	0.03	0.45++	0.03	0.45++	0.03
100 SEED WEIGHT	0.50++	0.31+	0.78++	0.17	0.17	0.23	0.47++	0.28+	0.24	-0.21	0.24	-0.21
QUALITY OF SEED	-0.23	0.16	-0.19	-0.06	-0.06	0.04	-0.04	0.04	0.12	0.12	0.12	0.12

TABLE 164 EXPERIMENT 409 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
3	HARK	0.00	80.00	28.20	20.81	2.00
2	SWIFT	0.00	80.00	29.67	22.72	3.00
4	HOLGSON	0.00	80.00	39.40	17.44	3.00
5	AMSOY 71	0.00	80.00	30.60	18.95	3.00
1	ALTONA	0.00	80.00	31.97	21.02	2.00
6	CCRSOY	0.00	80.00	51.45	16.82	3.00
7	WELLS	0.00	80.00	28.20	18.16	3.00
5	CCUMBUS	0.00	80.00	29.65	17.54	3.00
10	CIARK 63	0.00	80.00	26.13	16.98	3.00
12	WILLIAMS	0.00	80.00	28.67	17.18	3.00
8	FCRREST	0.00	80.00	30.15	21.12	2.00
11	WCCDWORTH	0.00	80.00	29.13	17.46	2.00
14	BONUS	0.00	80.00	26.17	16.02	2.50
13	CALLAND	0.00	80.00	19.58	16.17	4.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	80.00	30.64	18.45	2.75
COEFFICIENT OF VARIATION		0.00%	0.00	3.45	3.36	0.08
5% ISL VARIETY MEANS (*****=NS)		0.00	0.00%	22.54%	3.94%	5.61%
		0.00	0.00	9.88	1.04	0.22
C C R E L A T I O N S						
		{+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	0.00	0.00	0.29+	0.50++	-0.23
DAYS TC	FLCWR	0.00	0.00	0.32+	0.31+	0.16
DAYS TC	MATURITY	0.00	0.00	0.00	0.78++	-0.19
NODULE NUMBER 1		0.00	0.00	0.42++	0.17	-0.06
NODULE NUMBER 2		0.00	0.00	0.20	0.23	0.04
NODULE WEIGHT 1		0.00	0.00	0.45++	0.40++	-0.04
NODULE WEIGHT 2		0.00	0.00	0.03	0.28+	0.04
PLANT	HEIGHT	0.00	0.00	0.45++	0.24	0.12
	LOGGING	0.00	0.00	0.63++	-0.21	0.12
	SHATTER	1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	1.00	-0.03	-0.09
100 SEED	WEIGHT	0.00	0.00	-0.03	1.00	-0.43++
QUALITY	OF SEED	0.00	0.00	-0.09	-0.43++	1.00



TABLE 165 EXPERIMENT 386 YEAR 1975

REGION - MIDDLE EAST COUNTRY - SAUDI ARABIA  
 SITE - AL-HASSA ELEVATION - 145 M  
 LATITUDE - 25 DEG. 20 MIN. N LONGITUDE - 49 DEG. 10 MIN. E  
 COOPERATOR - CHINESE AGRICULTURAL TECHNICAL MISSION  
 DATE PLANTED - AUGUST 12, 1975 DATE HARVESTED - NOVEMBER, 1975  
 SOIL PH 8.0  
 FERTILIZER USED (KG/HA) - N 40.0, P 26.4  
 NUMBER CF IRRIGATIONS - 11

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
6	BOSSIER	2145.43	45.00	106.00	0.00	0.00	0.00	0.00	0.00	0.00	48.05	1.00
1	JUPITER	1953.72	54.50	110.25	0.00	0.00	0.00	0.00	0.00	0.00	77.10	2.00
7	DAVIS	1699.09	38.50	96.50	0.00	0.00	0.00	0.00	0.00	0.00	40.10	1.00
9	FORREST	1566.98	35.00	91.25	0.00	0.00	0.00	0.00	0.00	0.00	37.30	1.00
2	HAMETCN 266A	1556.56	34.50	90.00	0.00	0.00	0.00	0.00	0.00	0.00	27.93	1.00
3	HARDEE	1438.62	40.75	91.25	0.00	0.00	0.00	0.00	0.00	0.00	38.13	1.00
10	COLUMBUS	1376.11	28.75	89.00	0.00	0.00	0.00	0.00	0.00	0.00	51.28	1.00
14	CALLAND	1324.43	28.25	87.50	0.00	0.00	0.00	0.00	0.00	0.00	54.55	1.00
11	CLARK 63	1306.93	28.00	85.75	0.00	0.00	0.00	0.00	0.00	0.00	50.10	1.00
4	IMPROVED PELICAN	1284.42	42.00	90.25	0.00	0.00	0.00	0.00	0.00	0.00	75.20	2.00
15	SEMME	1260.25	34.00	87.25	0.00	0.00	0.00	0.00	0.00	0.00	26.18	1.00
13	WILLIAMS	1216.91	28.50	84.25	0.00	0.00	0.00	0.00	0.00	0.00	47.35	1.00
8	TRACY	1078.13	35.00	79.50	0.00	0.00	0.00	0.00	0.00	0.00	29.78	1.00
5	COBB	1076.47	35.00	83.00	0.00	0.00	0.00	0.00	0.00	0.00	45.73	1.00
12	WOODWORTH	1058.13	27.75	76.00	0.00	0.00	0.00	0.00	0.00	0.00	43.68	1.00
GRAND MEAN												
1422.81												
STANDARD ERROR OF A VARIETY MEAN												
45.00												
COEFFICIENT OF VARIATION												
6.33%												
5% LSD VARIETY MEANS (*****=NS)												
128.62												
C O R R E L A T I O N S												
(+ - PROB=.05      +- - PROB=.01)												
YIELD	KG/HA	1.00	0.68++	0.90++	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
DAYS TO FLOWER	1.00	0.68++	1.00	0.80++	0.00	0.00	0.00	0.00	0.00	0.00	0.42++	0.67++
DAYS TO MATURITY	0.90++	0.80++	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42++	0.46++
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
PLANT	1.00	0.68++	0.90++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEIGHT	0.24	0.42++	0.42++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.80++
LOGGING	0.24	0.67++	0.46++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80++	1.00
SHARPER	-0.03	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.23	0.03
HARVEST	0.31+	0.16	0.29+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.05
PLANT	0.62++	0.78++	0.71++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50++	0.56++
PODS PER 100 SEED	0.27+	-0.11	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.06	-0.09
QUALITY OF SEED	-0.11	0.10	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30+	0.34++
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 165

EXPERIMENT 386

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
6	BOSSIER	1.00	201.75	30.75	10.80	1.00	30.7	26.4
1	JUPITER	2.00	203.50	37.75	12.25	3.00	35.7	24.8
7	DAVIS	1.00	196.00	26.00	11.45	1.00	36.1	24.7
9	FORREST	1.00	199.00	30.00	9.60	2.25	26.0	28.6
2	HAMPTON 266A	2.00	201.25	23.75	13.15	1.75	31.5	26.8
3	HARDEE	2.00	201.50	33.50	9.25	1.25	31.5	26.1
10	COLUMBUS	2.00	204.75	27.75	11.20	1.25	39.9	23.5
14	CALLAND	1.00	199.00	27.00	12.80	2.50	36.8	25.4
11	CLARK 63	1.00	197.00	20.50	11.18	1.50	35.8	25.4
4	IMPROVED PELICAN	1.00	196.75	30.75	8.75	1.75	41.2	22.8
15	SEMME	2.00	197.50	22.00	10.43	1.50	36.8	23.3
13	WILLIAMS	2.00	200.25	21.00	12.65	1.50	42.4	22.7
8	TRACY	2.00	197.00	23.50	11.63	1.75	37.2	23.2
5	COBB	1.00	200.00	26.25	8.07	2.00	38.1	22.7
12	WOODWORTH	1.00	194.25	18.25	9.90	2.50	38.0	24.3
GRAND MEAN								
			1.47	199.30	26.58	10.87	1.77	
STANDARD ERROR OF A VARIETY MEAN			0.00	3.22	0.95	0.26	0.24	
COEFFICIENT OF VARIATION			0.00%	3.24%	7.14%	4.70%	26.83%	
5% LSD VARIETY MEANS (*****=NS)			0.00	*****	2.71	0.73	0.68	
C C R R E L A T I O N S								
(+ - PROB=.05      ++ - EROR=.01)								
YIELD	KG/HA	-0.03	0.31+	0.62++	0.27+	-0.11	0.00	0.00
DAYS TO FLOWER		0.11	0.16	0.78++	-0.11	0.10	0.00	0.00
DAYS TO MATURITY		0.04	0.29+	0.71++	0.20	-0.02	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT		-0.23	0.07	0.50++	-0.06	0.00	0.00	0.00
LODGING		0.03	0.05	0.56++	-0.09	0.30+	0.00	0.00
SHATTER		1.00	0.22	0.08	0.38++	0.34+	0.00	0.00
HARVEST		0.22	1.00	0.29+	0.15	-0.07	0.00	0.00
PLANT		0.08	0.29+	1.00	-0.14	0.13	0.00	0.00
100 SEED		0.38++	0.15	-0.14	1.00	0.12	0.00	0.00
QUALITY	OF SEED	-0.07	0.13	0.12	0.03	0.03	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 166

EXPERIMENT 382

YEAR 1975

REGION - MIDDLE EAST  
 SITE - WADI JIZAN  
 LATITUDE - 17 DEG. 55 MIN. N  
 COOPERATION - A.M. EL-MARAKBY  
 DATE PLANTED - NOVEMBER 18, 1975  
 SCIL TYPE - SILTY LOAM, PH 7.7  
 FERTILIZER USED (KG/HA) - P 26.2, K 33.3  
 AMOUNT OF MOISTURE - 15 MM  
 NUMBER OF IRRIGATIONS - 6

COUNTRY - SAUDI ARABIA  
 ELEVATION - 83 M

DATE HARVESTED - FEBRUARY, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TC FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
1	JUPITER	1621.99	30.25	91.50	0.00	0.00	0.00	0.00	29.98	1.00
6	BOSSIER	1515.30	28.50	82.00	1.50	2.25	0.00	0.00	17.55	1.00
7	DAVIS	1470.71	26.50	86.75	0.00	1.25	0.00	0.00	15.85	1.00
10	COLUMBUS	1381.11	26.50	87.00	2.25	4.25	0.00	0.00	20.60	2.00
14	CAILAND	1240.25	25.75	82.75	0.25	1.25	0.00	0.00	20.85	2.00
13	WILLIAMS	1186.90	26.75	80.75	1.75	3.00	0.00	0.00	21.23	2.00
11	CLARK 63	1043.13	26.50	82.75	0.75	1.00	0.00	0.00	19.65	2.00
4	IMPROVED PELICAN	1030.62	29.00	80.75	0.25	0.50	0.00	0.00	25.53	1.00
5	COBB	980.20	26.00	80.00	0.75	2.25	0.00	0.00	17.33	1.00
15	SEMMES	966.44	26.50	81.25	0.00	0.75	0.00	0.00	12.80	1.00
12	WOODWORTH	962.28	27.00	77.50	0.50	2.00	0.00	0.00	18.30	2.00
3	HARDEE	958.52	28.50	86.25	0.50	1.75	0.00	0.00	12.73	1.00
9	FORREST	780.57	26.25	81.00	0.50	1.25	0.00	0.00	17.65	1.00
8	TRACY	729.31	25.75	77.25	3.00	2.00	0.00	0.00	14.70	1.00
2	HAMPTON 266A	723.48	25.25	84.75	2.00	2.75	0.00	0.00	13.15	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1106.05	27.00	82.82	0.93	1.75	0.00	0.00	18.52	1.33
COEFFICIENT OF VARIATION		133.27	0.30	0.40	0.59	0.98	0.00	0.00	1.08	0.00
5% ISI VARIETY MEANS (*****=NS)		24.10%	2.23%	0.93%	127.17%	111.47%	0.00%	0.00%	11.65%	0.00%
		380.35	0.86	1.15	1.69	*****	0.00	0.00	3.08	0.00
C O R R E L A T I O N S										
(* - PROE=.05 ** - PFCB=.01)										
YIELD	KG/HA	1.00	0.18	0.40**	-0.27*	-0.04	0.00	0.00	0.53**	0.09
DAYS TC	FLOWER	0.18	1.00	0.41**	-0.15	-0.16	0.00	0.00	0.44**	-0.24
DAYS TO MATURITY		0.40**	0.41**	1.00	-0.15	-0.05	0.00	0.00	0.31*	-0.13
NODULE NUMBER 1		-0.27*	-0.15	-0.15	1.00	0.70**	0.00	0.00	-0.16	0.08
NODULE NUMBER 2		-0.14	-0.16	-0.05	0.70**	1.00	0.00	0.00	-0.11	0.18
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
PLANT	HEIGHT	0.53**	0.44**	0.31*	-0.16	-0.11	0.00	0.00	1.00	0.22
LOGGING		0.09	-0.24	-0.13	0.08	0.18	0.00	0.00	0.22	1.00
SHATTER		-0.32*	-0.51**	-0.17	0.27*	0.18	0.00	0.00	-0.52**	0.02
HARVEST		0.37**	0.09	0.15	-0.19	0.05	0.00	0.00	0.23	-0.01
PODS PER PLANT		0.72**	0.27*	0.39**	-0.26*	-0.00	0.00	0.00	0.32*	-0.01
100 SEED WEIGHT		0.33*	-0.19	0.27*	0.04	0.22	0.00	0.00	0.12	0.45**
QUALITY OF SEED		-0.22	0.0	0.21*	0.02	-0.13	0.00	0.00	-0.16	-0.28*

TABLE 166 EXPERIMENT 382 YEAR 1975 (CONTINUED)

PNTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	180.50	17.40	20.03	2.00
6	BOSSIER	1.25	191.00	14.58	18.23	1.00
7	DAVIS	1.75	187.00	13.90	18.85	1.00
10	COLUMBUS	1.75	190.00	14.40	19.83	1.00
14	CALLAND	1.25	192.75	12.30	21.30	2.00
15	WILLIAMS	1.25	168.50	15.13	20.43	1.25
11	CLARK 63	2.00	145.25	13.23	17.95	1.00
4	IMPROVED PELICAN	1.00	194.50	11.70	14.28	1.00
5	COBB	1.75	151.00	16.25	17.88	1.00
15	SEMMES	2.00	185.75	12.70	17.75	2.00
12	WOODWORTH	2.00	190.75	11.93	18.35	1.00
3	HARDEE	1.25	161.00	18.38	16.40	2.00
9	FORREST	1.25	189.50	16.30	17.25	2.00
8	TRACY	2.00	152.75	9.42	17.08	1.50
2	HAMPTON 266A	3.00	184.50	10.00	18.45	2.00
	GRAND MEAN	1.63	177.65	13.44	18.27	1.45
	STANDARD ERROR OF A VARIETY MEAN	0.17	6.65	1.21	0.70	0.10
	COEFFICIENT OF VARIATION	20.84%	7.49%	18.03%	7.70%	13.32%
	5% ISI VARIETY MEANS (*****=NS)	0.49	18.98	3.46	2.01	0.28
C C R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	-0.32+	0.37++	0.72++	0.33+	-0.22
DAYS TO FLOWER		-0.51++	0.09	0.27+	-0.19	0.0
DAYS TO MATURITY		-0.17	0.15	0.39++	0.27+	0.27+
NODULE NUMBER 1		0.27+	-0.19	-0.26+	0.04	0.02
NODULE NUMBER 2		0.18	0.05	-0.00	0.22	-0.13
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		-0.52++	0.23	0.32+	0.12	-0.16
ICDGING		0.02	-0.01	-0.01	0.45++	-0.28+
SHATTER		1.00	-0.08	-0.35++	-0.01	0.05
PLANTS HARVEST		-0.08	1.00	-0.01	0.15	0.07
PODS PER PLANT		-0.35++	-0.01	1.00	0.18	-0.13
100 SEED WEIGHT		-0.01	0.15	0.16	1.00	0.08
QUALITY OF SEED		0.05	0.07	-0.13	0.08	1.00

TABLE 167 EXPERIMENT 436 YEAR 1975

REGION - NORTH AMERICA  
 SITE - URBANA, ILLINOIS  
 LATITUDE - 40 DEG. 7 MIN. N  
 CCOPERATOR - INTSOY  
 DATE PLANTED - MAY 16, 1975  
 SCIL PH 6.5  
 FERTILIZER USED (KG/HA) - P 35., K 66.)  
 AMOUNT OF MOISTURE - 619 MM

COUNTY - U.S.A.  
 ELEVATION - 226 M  
 LONGITUDE - 88 DEG. 13 MIN. W  
 DATE HARVESTED - SEPTEMBER, 1975

ENTY ACREFF	VARIETY OR CROSS	YIELD KG/HA	DAYS TC FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	PIANT HEIGHT	LOGGING
8	WELLS	4317.53	39.00	129.00	245.50	0.00	2.34	0.00	123.25	3.00
6	CORSOY	4186.25	41.50	131.00	284.50	0.00	2.04	0.00	117.75	3.50
7	REESON	4176.25	37.50	129.00	176.25	0.00	2.07	0.00	91.50	3.75
5	AMSOY 71	4124.99	39.00	133.00	358.25	0.00	1.39	0.00	111.75	4.00
3	HARK	4001.22	39.75	117.00	251.50	0.00	1.88	0.00	115.75	2.75
11	CIARK 63	3525.78	49.00	140.00	226.50	0.00	2.41	0.00	117.50	2.75
12	WILLIAMS	3818.68	44.75	137.00	299.75	0.00	1.93	0.00	124.50	2.75
13	WOODWORTH	3684.07	48.75	139.00	220.00	0.00	1.67	0.00	115.25	3.00
15	BCNUS	3579.05	45.50	148.00	218.00	0.00	2.24	0.00	127.25	3.75
2	SWIFT	3471.53	43.00	117.00	170.25	0.00	1.90	0.00	106.75	3.25
10	COLUMBUS	3448.19	40.50	141.00	233.50	0.00	2.17	0.00	115.25	3.00
14	CALLAND	3334.42	42.00	148.00	211.00	0.00	2.27	0.00	117.50	3.00
4	HOGSON	3286.91	42.25	117.00	159.75	0.00	1.42	0.00	94.75	3.50
5	FCREST	2910.17	79.50	168.00	182.50	0.00	1.46	0.00	143.75	4.50
1	ALICNA	2882.24	39.25	108.00	162.75	0.00	1.81	0.00	82.75	4.00
	GRAND MEAN	3675.82	44.68	133.47	229.33	0.00	1.93	0.00	113.95	3.37
	STANDARD ERROR OF A VARIETY MEAN	319.20	2.87	0.00	33.61	0.00	0.40	0.00	7.63	0.41
	COEFFICIENT OF VARIATION	17.37%	12.85%	0.00%	29.31%	0.00%	40.95%	0.00%	13.39%	24.64%
51	ISI VARIETY MEANS (*****=NS)	911.01	8.19	0.00	95.92	0.00	*****	0.00	21.77	*****
C O R R E L A T I O N S										
	YIELD	1.00	-0.26+	-0.09	0.24	0.00	0.12	0.00	-0.00	-0.49++
	DAYS TC	-0.26+	1.00	0.63++	-0.11	0.00	-0.17	0.00	0.43++	0.22
	DAYS TO MATURITY	-0.09	0.63++	1.00	0.05	0.00	0.04	0.00	0.61++	0.11
	NCNULE NUMBER 1	0.24	-0.10	0.05	1.00	0.00	0.25	0.00	0.09	-0.03
	NCNULE NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
	NCNULE WEIGHT 1	0.12	-0.17	0.04	0.25	0.00	1.00	0.00	-0.19	-0.05
	NCNULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
	PLANT	-0.00	0.43++	0.61++	0.09	0.00	-0.19	0.00	1.00	0.05
	LOGGING	-0.49++	0.22	0.11	-0.03	0.00	-0.05	0.00	0.05	1.00
	SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PLANT	0.00	-0.17	-0.11	0.32+	0.00	0.17	0.00	-0.06	-0.06
	PODS PER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	100 SEED	0.30+	-0.38++	-0.33++	0.05	0.00	0.20	0.00	-0.53++	-0.22
	QUALITY	0.31+	0.21	-0.38	-0.21	0.00	0.02	0.00	-0.26+	0.45++



TABLE 167 EXPERIMENT 436 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
8	WELLS	1.00	144.00	0.00	13.13	2.00	41.6	22.7
9	CORSOY	1.00	144.75	0.00	13.75	1.75	41.4	23.2
7	BFESON	1.00	136.50	0.00	16.65	2.25	40.8	23.5
5	AMSOY 71	1.00	141.00	0.00	15.30	2.25	41.0	23.9
3	HARK	1.00	140.00	0.00	14.53	1.75	42.0	23.2
11	CLARK 63	1.00	141.25	0.00	14.08	1.75	41.9	22.8
13	WILLIAMS	1.00	147.00	0.00	15.45	1.25	42.4	23.0
12	WOODWORTH	1.00	133.00	0.00	14.58	1.25	43.0	22.6
15	BCNUS	1.00	141.75	0.00	13.83	1.25	44.4	21.8
2	SWIFT	1.00	144.75	0.00	14.10	2.25	40.7	23.4
10	COLUMBUS	1.00	149.25	0.00	13.43	1.00	42.8	21.1
14	CALLAND	1.00	138.75	0.00	13.03	2.00	41.3	21.3
4	HOLGSON	1.00	151.25	0.00	13.90	1.50	41.6	23.5
5	FORREST	1.00	132.50	0.00	11.65	2.75	41.2	20.8
1	ALTONA	1.00	137.75	0.00	14.70	2.75	43.2	22.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	141.57	0.00	14.14	1.85		
COEFFICIENT OF VARIATION		0.00	9.38	0.00	0.75	0.30		
5% ISI VARIETY MEANS (*****=NS)		0.00%	13.26%	0.00%	10.55%	31.94%		
		0.00	*****	0.00	2.13	0.84		
C C R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.04	0.00	0.30+	-0.31+		
DAYS TO	FLOWER	0.00	-0.17	0.00	-0.38++	0.21		
DAYS TO	MATURITY	0.00	-0.11	0.00	-0.33++	-0.08		
NCDULE	NUMBER 1	0.00	0.32+	0.00	0.05	-0.21		
NCDULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00		
NCDULE	WEIGHT 1	0.00	0.17	0.00	0.20	0.02		
NCDULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	0.00	-0.06	0.00	-0.53++	-0.26+		
LODGING		0.00	-0.06	0.00	-0.22	0.45++		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00		
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00		
100 SEED	WEIGHT	0.00	0.00	0.00	0.00	0.00		
QUALITY	CF SEED	0.00	0.01	0.00	-0.14	1.00		

TABLE 168 EXPERIMENT 651 YEAR 1975

REGION - CCEANIA COUNTRY - FIJI  
 SITE - LEGALEGA ELEVATION - 14 M  
 LATITUDE - 17 DEG. 45 MIN. S LONGITUDE - 177 DEG. 27 MIN. E  
 COOPERATORS - A. NAVUKA, S.G. VESPER  
 DATE PLANTED - DECEMBER 19, 1975 DATE HARVESTED - MARCH, 1976  
 SOIL PH 5.5  
 FERTILIZER USED (KG/HA) - P 15.3, K 54.8  
 AMOUNT OF MOISTURE - 1176 MM  
 SUBSTITUTE VARIETIES - PICKETT 71, BONUS, BEESON

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TC FLOWER	DAYS TC MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
3	HARDEE	3107.77	39.00	113.00	151.50	316.75	0.00	0.00	43.75	1.00
2	HAMPTON 266A	2952.52	33.00	101.00	224.50	433.75	0.00	0.00	32.50	1.00
6	BOSSIER	2856.83	30.00	101.75	144.75	176.00	0.00	0.00	30.75	1.00
4	PICKETT 71	2804.41	29.50	96.25	105.25	176.75	0.00	0.00	25.00	1.00
1	JUPITER	2718.31	48.00	126.25	397.00	374.00	0.00	0.00	82.50	1.00
10	COLUMBUS	2384.54	28.25	88.75	191.25	333.25	0.00	0.00	55.00	1.00
9	FORREST	2284.18	30.00	89.25	74.00	185.75	0.00	0.00	37.50	1.00
8	TRACY	2076.90	31.25	95.75	122.75	240.75	0.00	0.00	30.75	1.00
13	WILLIAMS	2075.24	26.25	88.00	167.00	246.75	0.00	0.00	51.25	1.00
15	BEESON	1820.53	24.50	81.00	123.00	209.50	0.00	0.00	43.75	1.00
14	CALLAND	1810.44	24.50	84.00	131.25	244.25	0.00	0.00	56.25	1.00
7	BONUS	1738.71	24.25	83.00	142.00	250.75	0.00	0.00	45.00	1.00
12	WOODWORTH	842.95	26.25	84.00	145.25	173.50	0.00	0.00	41.25	1.00
5	COBB	792.16	34.00	108.00	93.25	156.25	0.00	0.00	32.50	1.00
11	CIARK 63	627.19	26.50	88.00	165.50	206.75	0.00	0.00	39.00	1.00
GRAND MEAN										
2059.51										
STANDARD ERROR OF A VARIETY MEAN										
191.89										
COEFFICIENT OF VARIATION										
18.63%										
5% ISI VARIETY MEANS (*****=NS)										
547.66										
C O R R E L A T I O N S										
(+ - PROE=.05 +- - PROE=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		0.44++		0.45++	0.23	0.41++	0.00	0.00	0.15	0.00
DAYS TO MATURITY		1.00	0.95++	0.50++	0.50++	0.31+	0.00	0.00	0.38++	0.00
NODULE NUMBER 1		0.23	0.95++	1.00	0.40++	0.27+	0.00	0.00	0.26+	0.00
NODULE NUMBER 2		0.41++	0.50++	0.40++	1.00	0.49++	0.00	0.00	0.65++	0.00
NODULE WEIGHT 1		0.00	0.31+	0.27+	0.49++	1.00	0.00	0.00	0.36++	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
PLANT HEIGHT		0.15	0.38++	0.26+	0.65++	0.36++	0.00	0.00	1.00	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		-0.39	-0.47++	-0.54++	-0.11	-0.08	0.00	0.00	0.15	0.00
PODS PER PLANT		0.70++	-0.02	-0.07	0.07	0.34++	0.00	0.00	0.17	0.00
100 SEED WEIGHT		-0.04	-0.56++	0.62++	0.08	-0.09	0.00	0.00	-0.07	0.00
QUALITY OF SEED		0.17	-0.05	0.06	0.12	0.11	0.00	0.00	0.06	0.00
		-0.07	-0.09	-0.01	-0.02	0.11	0.00	0.00	-0.07	0.00

TABLE 168 EXPERIMENT 651 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
3	HARLEE	1.25	138.50	46.70	17.93	3.00
2	HAMPTON 266A	1.00	172.00	33.75	18.00	3.00
6	BOSSIEK	1.00	166.75	32.60	18.20	3.00
4	PICKETT 71	1.50	187.50	23.38	18.83	1.50
1	JUPITER	1.00	160.00	36.78	17.88	2.00
10	COLUMBUS	1.75	190.50	24.40	17.13	2.75
9	FORREST	1.25	181.75	28.95	13.43	1.25
8	TRACY	1.25	111.25	35.33	19.45	3.25
13	WILLIAMS	1.75	161.50	19.70	19.85	1.25
15	BEESON	2.00	190.25	15.98	19.65	3.50
14	CALLAND	2.00	164.25	19.18	17.33	3.00
7	BONUS	1.75	178.25	18.90	18.13	3.00
12	WOODWORTH	1.50	52.25	32.38	16.65	2.25
5	COBB	1.00	29.25	50.43	17.85	3.00
11	CIARK 63	1.25	27.00	39.70	17.10	2.50
GRAND MEAN						
		1.42	140.73	30.54	17.82	2.55
STANDARD ERROR OF A VARIETY MEAN		0.20	9.68	2.89	3.65	3.25
COEFFICIENT OF VARIATION		28.68%	13.76%	18.83%	7.24%	19.67%
5% ISI VARIETY MEANS (*****=NS)		0.58	27.63	8.23	1.84	0.72
C C R E L A T I O N S						
		(+ - PROB=.05			++ - PROB=.01)	
YIELD	KG/HA	-0.09	0.70++	-0.04	0.17	-0.07
DAYS TO *LOWER		-0.47++	-0.72	0.56++	-0.05	-0.39
DAYS TO MATURITY		-0.54++	-0.07	0.62++	0.06	-0.01
NCDULE NUMBER 1		-0.11	0.37	0.08	0.12	-0.02
NCDULE NUMBER 2		-0.08	0.34++	-0.09	0.11	0.11
NCDULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NCDULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.15	0.17	-0.07	0.06	-0.07
ICDGING		0.00	0.00	0.00	0.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		1.00	0.28+	-0.49++	0.09	-0.03
PODS PER PLANT		0.28+	1.00	-0.66++	0.07	-0.10
100 SEED WEIGHT		-0.49++	-0.66++	1.00	-0.11	0.11
QUALITY OF SEED		0.09	0.07	-0.11	1.00	0.31+
		-0.03	-0.10	0.11	0.31+	1.00

TABLE 169 EXPERIMENT 650 YEAR 1975

REGION - OCEANIA COUNTRY - FIJI  
 SITE - SEQAQA ELEVATION - 20 M  
 LATITUDE - 16 DEG. 37 MIN. S LONGITUDE - 178 DEG. 46 MIN. E  
 COOPERATORS - M. PRASAD, S.G. VESPER  
 DATE PLANTED - DECEMBER 16, 1975 DATE HARVESTED - MARCH, 1976  
 SOIL TYPE - SAND 70%, SILT 22%, CLAY 8%, PH 4.9  
 FERTILIZER USED (KG/HA) - P 15.3, K 55.0  
 AMOUNT OF MOISTURE - 2400 MM  
 SUBSTITUTE VARIETIES - PICKETT 71, BCNUS

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO Maturity	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
6	COLUMBUS	1124.81	37.25	99.75	44.00	73.25	0.65	1.38	45.23	1.00
9	WILLIAMS	964.78	35.25	97.50	10.00	21.75	0.28	0.63	40.43	1.00
3	BONUS	833.50	35.25	92.00	30.50	39.25	0.63	0.68	33.28	1.00
4	TRACY	827.25	37.75	97.50	14.75	19.75	0.48	1.73	29.49	1.00
5	FORREST	816.00	37.75	108.50	23.50	44.75	0.40	1.03	36.45	1.00
10	CAILAND	812.66	34.75	109.00	16.50	42.25	0.62	1.20	43.83	1.00
1	PICKETT 71	730.98	40.00	98.50	22.75	35.75	0.53	0.60	23.10	1.00
8	WOODWORTH	673.05	36.50	93.25	10.25	54.75	0.30	0.52	38.75	1.00
2	BOSSIER	633.46	37.75	111.00	17.75	26.00	0.33	1.45	22.98	1.00
7	CLARK 63	357.57	38.50	98.75	39.50	28.75	0.85	0.75	38.00	1.00
	GRAND MEAN	777.41	37.08	99.58	22.95	38.63	0.50	1.79	35.14	1.00
	STANDARD ERROR OF A VARIETY MEAN	88.70	1.03	2.32	9.66	13.89	0.14	0.28	1.75	0.00
	COEFFICIENT OF VARIATION	22.82%	5.54%	4.66%	84.15%	71.92%	54.08%	69.34%	9.95%	0.00%
	5% ISI VARIETY MEANS (*****=NS)	257.38	2.98	6.74	*****	*****	*****	*****	5.07	0.00
C O R R E L A T I O N S										
	YIELD	KG/HA								
	DAYS TO FLOWER	1.00	-0.36+	0.05	0.31	0.36+	0.08	0.15	0.45++	0.00
	DAYS TO MATURITY	-0.36+	1.00	0.21	-0.01	0.33	-0.11	-0.01	-0.35+	0.00
	NODULE NUMBER 1	0.05	0.21	1.00	0.01	0.09	-0.03	0.44++	0.29	0.00
	NODULE NUMBER 2	0.36+	-0.01	0.01	1.00	0.42++	0.66++	0.03	0.32+	0.00
	NODULE WEIGHT 1	0.08	0.03	0.09	0.42++	1.00	0.23	0.46++	0.47++	0.00
	NODULE WEIGHT 2	0.15	-0.11	-0.03	0.66++	0.23	1.00	0.26	0.21	0.00
	PLANT HEIGHT	0.45++	-0.35+	0.29	0.33	0.46++	0.26	1.00	0.47++	0.00
	LOGGING	0.00	0.00	0.29	0.32+	0.47++	0.21	0.47++	1.00	0.00
	SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	PODS PER PLANT	0.47++	-0.02	0.21	0.12	0.16	0.00	0.20	-0.19	0.00
	100 SEED WEIGHT	-0.17	0.07	0.01	0.01	0.04	0.10	0.12	0.38+	0.00
	QUALITY OF SEED	0.11	-0.42++	-0.23	0.06	-0.01	0.28	0.10	0.30	0.00
		0.45++	-0.07	0.30	0.37+	0.33+	0.23	0.16	0.52++	0.00

TABLE 169 EXPERIMENT 650 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	COLUMBUS	1.00	138.25	21.00	19.00	3.25
9	WILLIAMS	1.00	86.75	23.00	18.25	3.25
3	BONUS	1.00	163.50	12.00	21.25	3.00
4	TRACY	1.00	124.00	21.00	17.75	2.75
5	PERREST	1.00	161.75	21.75	15.00	3.00
10	CALLAND	1.00	115.25	18.00	20.50	3.50
1	PICKETT 71	1.00	151.75	14.75	16.50	2.00
8	WOODWORTH	1.00	57.50	23.25	17.25	2.75
2	BOSSIER	1.00	134.25	16.25	16.25	2.75
7	CLARK 63	1.00	26.75	35.00	18.50	3.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	115.98	20.60	18.03	2.93
COEFFICIENT OF VARIATION		0.00	5.26	2.32	0.51	0.48
5% ISI VARIETY MEANS (*****=NS)		0.00%	9.07%	22.50%	5.66%	32.68%
		0.00	15.25	6.72	1.48	*****
C C R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.47++	-0.07	0.11	0.45++
DAYS TO FLOWER		0.00	-0.02	0.07	-0.42++	-0.07
DAYS TO MATURITY		0.00	0.21	0.10	-0.23	0.30
NODULE NUMBER 1		0.00	0.12	0.01	0.06	0.37+
NODULE NUMBER 2		0.00	0.16	0.04	-0.01	0.33+
NODULE WEIGHT 1		0.00	0.00	0.10	0.28	0.23
NODULE WEIGHT 2		0.00	0.20	0.12	0.10	0.16
PLANT HEIGHT		0.00	-0.19	0.38+	0.30	0.52++
LC D G I N G		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	1.00	-0.60++	-0.09	-0.02
PLANTS HARVEST		0.00	-0.60++	1.00	-0.08	0.28
PODS PER PLANT		0.00	-0.09	-0.08	1.00	0.04
100 SEED WEIGHT		0.00	-0.02	0.28	0.04	1.00
QUALITY OF SEED		0.00				



TABLE 170 EXPERIMENT 641 YEAR 1975

REGION - OCEANIA COUNTRY - TAHITI  
 SITP - PAPETE ELEVATION - 2 M  
 COOPERATORS - J.L. PBOUL, R. YAU-AKUI LONGITUDE - 149 DEG. 30 MIN. W  
 DATE PLANTED - DECEMBER 3, 1975 DATE HARVESTED - MARCH, 1976  
 SOIL TYPE - SAND 29%, SILT 30%, CLAY 31%, PH 7.3  
 FERTILIZER USED (KG/HA) - P 10.0, K 60.0  
 AMOUNT OF MOISTURE - 537 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	DAVIS	4902.02	40.00	111.25	636.75	728.25	3.15	6.17	6.17	70.38	1.00
8	FORREST	4522.57	33.00	95.00	252.50	511.25	1.28	3.08	3.08	58.79	1.00
5	BOSSIER	4468.27	33.00	111.50	360.50	620.25	2.60	4.95	4.95	47.77	1.00
13	SEMMES	4413.63	33.00	117.50	422.50	732.25	2.10	4.03	4.03	43.83	1.00
12	CALLAND	3505.28	33.00	110.00	280.00	447.75	2.28	4.43	4.43	79.34	1.00
4	IMPROVED PELICAN	3376.51	33.00	131.00	321.50	607.50	1.95	3.28	3.28	40.25	1.00
9	COLUMBUS	2980.05	33.00	92.00	462.75	585.00	2.33	6.20	6.20	73.73	1.00
2	HAMPTON 266A	2775.18	33.00	131.50	469.50	877.75	2.48	5.95	5.95	54.76	1.00
3	HARDEE	2627.82	45.25	131.00	1084.75	1554.75	6.05	10.00	10.00	64.95	1.00
7	TFACY	2494.62	33.00	108.50	312.25	490.75	2.18	5.23	5.23	45.96	1.00
11	WILLIAMS	2487.37	33.00	92.00	389.00	512.25	2.08	4.32	4.32	60.04	1.00
10	WOODWORTH	2012.57	33.00	92.00	301.00	426.50	1.55	4.85	4.85	51.78	1.00
1	JUPITER	1445.08	61.00	146.00	1040.00	1942.50	6.88	11.95	11.95	95.58	1.00
	GRAND MEAN	3231.61	36.63	113.02	487.15	772.06	2.84	5.72	5.72	60.55	1.00
	STANDARD ERROR OF A VARIETY MEAN	483.89	0.49	3.12	94.29	102.19	0.44	0.99	0.99	2.20	0.00
	COEFFICIENT OF VARIATION	29.95%	2.65%	5.53%	38.71%	26.47%	31.31%	34.43%	34.43%	7.27%	0.00%
5%	ISD VARIETY MEANS (*****=NS)	1387.91	1.39	8.96	270.44	293.09	1.27	2.83	2.83	6.31	0.00
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)											
	YIELD KG/HA	1.00	-0.34+	-0.22	-0.26	-0.28+	-0.30+	-0.24	-0.24	-0.26	0.00
	DAYS TO FLOWER	-0.34+	1.00	0.61++	0.76++	0.86++	0.86++	0.74++	0.74++	0.68++	0.00
	DAYS TO MATURITY	-0.22	0.61++	1.00	0.52++	0.68++	0.59++	0.43++	0.43++	0.20	0.00
	NODULE NUMBER 1	-0.26	0.76++	0.52++	1.00	0.82++	0.89++	0.63++	0.63++	0.46++	0.00
	NODULE NUMBER 2	-0.28+	0.86++	0.68++	0.82++	1.00	0.87++	0.80++	0.80++	0.51++	0.00
	NODULE WEIGHT 1	-0.30+	0.86++	0.59++	0.89++	0.87++	1.00	0.73++	0.73++	0.55++	0.00
	NODULE WEIGHT 2	-0.24	0.74++	0.43++	0.63++	0.80++	0.73++	1.00	1.00	0.53++	0.00
	PLANT HEIGHT	-0.26	0.68++	0.20	0.46++	0.51++	0.55++	0.53++	0.53++	1.00	0.00
	LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	SHATTER	-0.03	-0.06	-0.16	-0.07	-0.03	-0.09	0.01	0.01	0.04	1.00
	HARVEST	0.67++	-0.45++	-0.22	-0.38++	-0.40++	-0.46++	-0.43++	-0.43++	-0.22	0.00
	PODS PER PLANT	0.03	0.57++	0.29+	0.55++	0.50++	0.60++	0.44++	0.44++	0.32+	0.00
	100 SEED WEIGHT	-0.23	0.30+	0.48++	0.24	0.32+	0.34+	0.31+	0.31+	0.37++	0.00
	QUALITY OF SEED	-0.05	-0.06	0.09	-0.05	-0.04	-0.03	0.02	0.02	0.34+	0.00
	DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 170 EXPERIMENT 641 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	DAVIS	1.00	180.00	47.63	22.91	2.00
8	FORREST	1.00	196.75	44.10	20.92	2.00
5	BOSSIER	1.00	148.25	48.73	23.42	2.00
13	SEMMES	1.00	191.00	39.70	23.40	2.00
12	CALLAND	1.00	150.50	42.65	25.83	3.25
4	IMPROVED PELICAN	1.00	176.25	31.10	23.03	2.00
2	COLUMBUS	1.00	161.75	30.68	24.68	2.50
2	HAMPTON 266A	1.00	126.75	33.48	27.60	2.50
3	HARDEP	1.00	87.25	51.00	24.02	2.50
7	TRACY	1.00	93.75	37.78	25.38	2.00
11	WILLIAMS	1.25	128.50	35.50	23.77	2.00
10	WOODWORTH	1.00	70.25	44.25	20.18	2.00
1	JUPITER	1.00	69.25	64.05	26.64	2.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.02	136.94	42.36	23.98	2.21
COEFFICIENT OF VARIATION		0.07	11.04	4.97	0.58	0.15
5% ISD VARIETY MEANS (*****NS)		13.61%	16.12%	23.49%	4.85%	13.86%
		*****	31.67	14.27	1.67	0.44
C O R R E L A T I O N S						
		(+ - PROB=.05 ++ - PROB=.01)				
YIELD	KG/HA	-0.03	0.67++	0.03	-0.23	0.00
DAYS TO FLOWER		-0.06	-0.45++	0.57++	0.00	0.00
DAYS TO MATURITY		-0.16	-0.22	0.29+	0.48++	0.00
NODULE NUMBER 1		-0.07	-0.38++	0.55++	0.24	0.00
NODULE NUMBER 2		-0.03	-0.40++	0.50++	0.32+	0.00
NODULE WEIGHT 1		-0.09	-0.46++	0.60++	0.34+	0.00
NODULE WEIGHT 2		0.01	-0.43++	0.44++	0.31+	0.00
PLANT HEIGHT		0.04	-0.22	0.32+	0.37++	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	-0.01	-0.14	-0.01	0.00
HARVEST		-0.01	1.00	-0.35+	-0.20	0.00
PLANT		-0.14	-0.35+	1.00	-0.01	0.00
100 SEED WEIGHT		-0.01	-0.20	-0.01	1.00	0.00
QUALITY OF SEED		-0.07	0.00	-0.14	0.32+	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	1.00

TABLE 171 EXPERIMENT 633 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - PARANA  
 LATITUDE - 31 DEG. 50 MIN. S  
 COOPERATOR - MARGARITA A. DE TRONCOSO  
 DATE PLANTED - JANUARY 12, 1976  
 AMOUNT OF MOISTURE - 479 MM

COUNTRY - ARGENTINA  
 ELEVATION - 111 M  
 LONGITUDE - 60 DEG. 31 MIN. W  
 DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	PORREST	2422.24	29.00	101.00	133.00	256.50	0.29	1.41	65.00	3.25
10	COLUMBUS	2245.17	29.00	93.25	78.50	191.50	0.47	0.92	62.50	1.50
13	CALLAND	2027.76	19.50	93.50	63.25	115.00	0.38	0.55	63.75	1.50
12	WILLIAMS	1963.50	19.00	82.50	104.25	110.00	0.50	0.51	50.00	1.00
14	BONUS	1838.55	16.00	91.25	77.50	218.50	0.55	1.23	61.25	1.75
5	AMSOY 71	1574.37	16.00	86.25	59.75	168.75	0.33	0.52	52.50	2.00
7	REFSON	1545.81	16.00	91.50	112.75	152.50	0.84	0.66	55.00	1.50
3	HARK	1501.18	16.00	87.50	49.25	136.50	0.18	0.39	48.75	2.00
8	WELLS	1360.17	16.00	91.75	99.25	173.75	0.55	0.71	46.25	1.25
4	HODGSON	1294.12	16.00	86.75	88.50	108.50	0.58	0.41	46.25	1.75
11	WOODWORTH	1278.06	19.00	81.00	78.50	76.75	0.43	0.58	51.25	1.50
6	CORSON	1253.07	16.00	98.00	81.00	172.25	0.44	0.81	47.50	2.00
1	ALTONA	1197.73	16.00	66.50	79.00	116.50	0.33	0.64	50.00	2.50
2	SWIFT	1010.31	16.00	87.50	66.25	66.25	0.48	0.59	41.25	2.00
	GRAND MEAN	1608.00	18.54	88.45	83.63	147.38	0.45	0.71	52.95	1.82
	STANDARD ERROR OF A VARIETY MEAN	81.55	0.13	1.76	14.58	29.11	0.11	0.23	2.32	0.21
	COEFFICIENT OF VARIATION	10.14%	1.44%	3.98%	34.87%	39.50%	48.68%	64.06%	8.75%	22.90%
	5% LSD VARIETY MEANS (*****=NS)	233.28	0.38	5.04	41.71	83.26	0.31	*****	6.63	0.60

C O R R E L A T I O N S										
					(+ - PROB=.05			++ - PROB=.01)		
YIELD	KG/HA	1.00	0.75++	0.41++	0.13	0.42++	-0.00	0.24	0.76++	0.10
DAYS TO FLOWER	0.75++	1.00	0.37++	0.26+	0.26+	0.34+	-0.14	0.34++	0.59++	0.23
DAYS TO MATURITY	0.41++	0.37++	1.00	0.19	0.42++	0.42++	0.04	0.35++	0.38++	0.13
NODULE NUMBER 1	0.13	0.26+	0.19	1.00	0.43++	0.43++	0.21	0.51++	0.13	0.06
NODULE NUMBER 2	0.42++	0.34+	0.42++	0.43++	1.00	-0.10	-0.10	0.69++	0.45++	-0.35++
NODULE WEIGHT 1	-0.00	-0.14	0.04	0.21	0.21	-0.10	1.00	-0.15	-0.08	-0.31+
NODULE WEIGHT 2	0.24	0.34++	0.35++	0.51++	0.51++	0.69++	-0.15	1.00	0.38++	0.41++
PLANT HEIGHT	0.76++	0.59++	0.38++	0.13	0.13	0.45++	-0.08	0.38++	1.00	0.31+
LODGING	0.10	0.23	0.13	0.06	0.06	0.35++	-0.31+	0.41++	0.31+	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.11	-0.17	0.34+	0.04	0.04	0.39++	0.13	0.12	0.10	0.13
PODS PER PLANT	0.35++	0.61++	0.15	0.25	0.03	0.03	-0.13	0.17	0.30+	0.09
100 SEED WEIGHT	-0.19	-0.59++	0.01	-0.03	-0.02	0.30+	0.30+	-0.14	-0.11	-0.40++
QUALITY OF SEED	-0.56++	-0.53++	-0.06	-0.10	-0.06	-0.06	-0.08	-0.07	-0.27+	0.12
DISEASE I	-0.38++	-0.49++	-0.16	-0.05	-0.14	0.39++	-0.24	-0.24	-0.24	-0.44++
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 171 EXPERIMENT 633 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
9	FORREST	1.00	184.25	39.10	16.13	2.00	39.8	20.6
10	COLUMBUS	1.00	188.00	28.72	18.25	1.75	43.5	19.9
13	CALLAND	1.00	162.25	27.15	20.00	2.50	42.4	20.2
12	WILLIAMS	1.00	177.25	21.60	20.63	1.75	43.2	20.9
14	BONUS	1.00	217.25	17.38	20.50	2.75	47.3	18.1
5	AMSOY 71	1.00	215.25	17.55	20.50	3.00	41.4	21.5
7	BEPSON	1.00	222.00	16.33	21.75	3.00	44.6	19.3
3	HARK	1.00	220.25	19.47	19.00	2.50	44.4	19.3
8	WFLS	1.00	207.75	16.60	20.75	3.25	44.4	19.7
4	HODGSON	1.00	180.50	23.78	20.50	2.75	42.6	21.3
11	WOODWORTH	1.00	67.75	40.22	17.75	2.00	42.2	19.4
6	CORSOY	1.00	228.50	19.28	19.75	3.00	45.8	18.0
1	ALTONA	1.00	174.75	18.75	18.75	3.00	43.5	19.0
2	SWIFT	1.00	168.75	19.63	18.50	3.50	43.2	20.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05      +- - PROB=-.01)								
YIELD	KG/HA	0.00	0.11	0.35++	-0.19	-0.56++	-0.38++	0.00
DAYS TO	FLOWER	0.00	-0.17	0.61++	-0.59++	-0.53++	-0.49++	0.00
DAYS TO	MATURITY	0.00	0.34+	0.15	0.01	-0.06	-0.16	0.00
NODULE	NUMBER 1	0.00	0.04	0.25	-0.03	-0.10	-0.05	0.00
NODULE	NUMBER 2	0.00	0.39++	0.03	-0.02	-0.06	-0.14	0.00
NODULE	WEIGHT 1	0.00	0.13	-0.13	0.30+	-0.08	0.39++	0.00
NODULE	WEIGHT 2	0.00	0.12	0.17	-0.14	-0.07	-0.24	0.00
PLANT	HEIGHT	0.00	0.10	0.30+	-0.11	-0.27+	-0.24	0.00
LODGING		0.00	0.13	0.09	-0.40++	0.12	-0.44++	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.61++	0.40++	0.19	0.18	0.00
PODS PER	PLANT	0.00	-0.61++	1.00	-0.61++	-0.47++	-0.43++	0.00
100 SEED	WEIGHT	0.00	0.40++	-0.61++	1.00	0.32+	0.60++	0.00
QUALITY	OF SEED	0.00	0.19	-0.47++	0.32+	1.00	0.27+	0.00
DISEASE	I	0.00	0.18	-0.43++	0.60++	0.27+	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 172 EXPERIMENT 450 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - AREPO-IZOZOG  
 LATITUDE - 18 DEG. 39 MIN. S  
 COOPERATOR - JUAN BELLOTT MONTALVO  
 DATE PLANTED - NOVEMBER 27, 1975  
 SOIL TYPE - SILT, PH 6.9  
 AMOUNT OF MOISTURE - 507 MM  
 NUMBER OF IRRIGATIONS - 2  
 LOCAL VARIETY - PELICANO

COUNTRY - BOLIVIA  
 ELEVATION - 389 M  
 LONGITUDE - 63 DEG. 1 MIN. W  
 DATE HARVESTED - MARCH, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NO. NODULE 1	NO. NODULE 2	WEIGHT 1	WEIGHT 2	PLANT HEIGHT	ICDGING
5	FORREST	4119.20	35.50	106.75	0.00	0.00	0.00	0.00	49.50	1.00
12	WOODWORTH	3502.99	31.75	83.50	0.00	0.00	0.00	0.00	60.25	1.00
7	DAVIS	3411.93	40.50	107.25	0.00	0.00	0.00	0.00	53.75	1.00
10	COLUMBUS	3367.38	34.25	94.00	0.00	0.00	0.00	0.00	68.50	1.00
13	WILLIAMS	3364.09	33.25	88.50	0.00	0.00	0.00	0.00	67.50	1.00
11	CLARK 63	3275.40	32.50	90.75	0.00	0.00	0.00	0.00	63.00	1.00
14	CALLANE	3256.03	35.00	105.75	0.00	0.00	0.00	0.00	74.75	1.00
6	BOSSIER	2965.34	35.00	108.75	0.00	0.00	0.00	0.00	31.75	1.00
1	JUPITER	2935.17	61.00	141.50	0.00	0.00	0.00	0.00	83.75	1.00
8	TRACY	2764.97	34.00	92.00	0.00	0.00	0.00	0.00	40.00	1.00
3	HARDEE	2748.47	43.00	113.25	0.00	0.00	0.00	0.00	56.25	1.00
5	COBB	2573.39	34.75	106.00	0.00	0.00	0.00	0.00	29.00	1.00
2	HAMPTON 266A	2406.48	35.00	110.75	0.00	0.00	0.00	0.00	35.00	1.00
4	IMPROVED PELICAN	2012.90	60.50	124.50	0.00	0.00	0.00	0.00	191.25	3.00
15	PELICANO	1625.32	61.00	135.50	0.00	0.00	0.00	0.00	71.75	4.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(* - PROE=.05 ** - FCB=.01)										
YIELD	KG/HA	1.00	-0.54**	-0.49**	0.00	0.00	0.00	0.00	-0.11	-0.65**
DAYS TO FLOWER	1.70	-0.54**	1.70	0.89**	0.00	0.00	0.00	0.00	0.63**	0.74**
DAYS TO MATURITY	-0.49**	0.89**	1.00	0.00	0.00	0.00	0.00	0.00	0.35**	0.56**
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	-0.11	0.63**	0.30	0.91	0.00	0.00	0.00	0.00	0.00	0.00
ICDGING	-0.65**	0.74**	0.56**	0.35**	0.00	0.00	0.00	0.00	1.00	0.47**
SHATER	-0.07	-0.20	-0.03	-0.03	0.00	0.00	0.00	0.00	-0.43**	1.00
HARVEST	0.26*	-0.22	-0.36**	-0.03	0.00	0.00	0.00	0.00	0.09	-0.26*
PLANTS PER 100 SEED	-0.45**	0.79**	0.70**	0.70**	0.00	0.00	0.00	0.00	0.49**	0.74**
WEIGHT	0.28*	-0.54**	-0.34**	-0.34**	0.00	0.00	0.00	0.00	-0.32*	-0.52**
QUALITY OF SEED	-0.51**	0.91**	0.83**	0.83**	0.00	0.00	0.00	0.00	0.72**	0.73**



ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	FORREST	1.00	143.50	55.78	16.25	1.00
12	WOODWORTH	1.00	180.50	36.60	17.70	1.00
7	DAVIS	2.00	201.75	36.23	16.30	1.00
10	COUMBUS	1.00	162.75	40.25	17.83	1.00
13	WILLIAMS	1.00	163.75	33.35	20.13	1.00
11	CLARK 63	1.75	152.00	41.45	18.15	1.00
14	CAILAND	1.00	162.50	32.35	21.95	2.00
6	BOSSIER	1.00	142.75	44.13	17.50	1.00
1	JUPITER	1.00	145.25	58.75	17.50	3.00
8	TRACY	1.00	179.25	36.05	17.88	1.00
3	HARDEE	2.00	150.00	56.75	17.25	1.00
2	CCBB	2.00	145.50	35.65	16.60	1.00
2	HAMPTON 26A	2.00	135.00	43.18	21.45	1.00
4	IMPROVED PELICAN	1.00	171.25	80.87	12.20	3.00
15	PELICANO	1.00	112.00	77.57	15.55	3.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.32	156.52	47.26	17.61	1.47
COEFFICIENT OF VARIATION		0.06	11.86	3.91	0.52	0.00
5% ISI VARIETY MEANS (*****=NS)		9.81%	15.16%	16.56%	5.91%	0.00%
		0.18	33.86	11.17	1.49	0.00
C C R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD KG/HA		-0.07	0.26+	-0.45++	0.28+	-0.51++
DAYS TO FLOWER		-0.20	-0.22	0.79++	-0.54++	0.91++
DAYS TO MATURITY		-0.03	-0.36++	0.70++	-0.34++	0.80++
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		-0.43++	0.09	0.49++	-0.32+	0.72++
LSDGING		-0.26+	-0.27+	0.74++	-0.52++	0.73++
SHATTER		1.00	0.02	-0.19	0.10	-0.39++
PLANTS HARVEST		0.02	1.00	-0.38++	-0.04	-0.22
PODS PER PLANT		-0.19	-0.38++	1.00	-0.61++	0.69++
100 SEED WEIGHT		0.10	-0.04	-0.61++	1.00	-0.36++
QUALITY OF SEED		-0.39++	-0.22	0.69++	-0.36++	1.00

TABLE 173 EXPERIMENT 447 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - BOLIVIA  
 SITE - PALOMETILLAS ELEVATION - 260 M  
 LATITUDE - 17 DEG. 20 MIN. S LONGITUDE - 63 DEG. 25 MIN. W  
 COORDINATOR - VIDAL VILASCO RIVAS  
 DATE PLANTED - DECEMBER 30, 1975  
 SOIL TYPE - SAND DATE HARVESTED - APRIL, 1976  
 AMOUNT OF MOISTURE - 411 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	CALLAND	4213.34	33.25	96.25	158.75	307.25	0.88	3.58	60.25	1.00
9	FORREST	3961.21	35.50	129.00	168.00	382.50	0.97	3.55	49.00	1.00
2	HAMPTON 266A	3898.70	38.25	125.50	253.25	766.00	1.35	5.60	46.50	1.00
7	DAVIS	3859.10	40.75	123.00	289.50	855.75	2.35	6.25	50.25	1.00
3	HARVEE	3852.85	43.25	125.50	378.75	1113.25	1.90	8.17	57.50	1.00
10	COLUMBUS	3788.26	32.50	97.25	179.50	355.50	1.08	3.58	62.75	1.00
5	COB3	3354.84	36.25	129.00	118.25	222.00	0.75	2.68	36.50	1.00
4	IMPROVED PELICAN	3283.99	45.50	115.75	294.50	1064.75	1.84	7.75	113.50	2.00
15	SEWES	3265.54	35.75	121.75	210.50	495.75	1.08	5.05	32.00	1.00
8	TRACY	3128.54	35.75	98.50	154.50	296.50	0.75	4.70	34.25	1.00
1	JUPITER	3090.20	52.25	124.50	362.75	1323.75	3.48	6.75	96.25	2.00
11	CLARK 63	3174.36	32.50	219.75	301.25	301.25	1.10	3.18	46.25	1.00
6	FOSSIER	2833.90	36.25	134.50	228.25	461.25	1.08	4.37	36.50	1.00
13	WILLIAMS	2565.10	34.00	92.75	212.25	266.50	1.10	4.15	40.75	1.00
12	WOODWORTH	2558.84	32.75	92.00	182.75	261.75	1.15	3.95	47.50	1.00
GRAND MEAN										
3361.90										
STANDARD ERROR OF A VARIETY MEAN										
207.47										
COEFFICIENT OF VARIATION										
12.27%										
5% ISI VARIETY MEANS (*****=NS)										
592.14										
0.75										
C O R R E L A T I O N S										
(+ - PROE=.05 ** - FECEB=.01)										
YIELD	KG/HA	1.00	0.03	0.25	-0.00	0.13	0.03	0.01	0.13	-0.12
DAYS TO FLOWER	0.03	1.00	0.52++	0.46++	0.75++	0.76++	0.65++	0.69++	0.81++	0.17
DAYS TO MATURITY	0.25	0.52++	1.00	0.42++	0.41++	0.28+	0.31+	0.05	0.31+	0.31+
MODULE NUMBER 1	-0.00	0.46++	0.22	1.00	0.74++	0.61++	0.57++	0.29+	0.51++	0.55++
MODULE NUMBER 2	0.13	0.75++	0.41++	0.74++	1.00	0.71++	0.71++	0.51++	0.60++	0.44++
MODULE WEIGHT 1	0.03	0.76++	0.28+	0.61++	0.70++	1.00	0.61++	1.00	0.38++	0.88++
MODULE WEIGHT 2	0.01	0.65++	0.31+	0.57++	0.71++	0.61++	0.38++	1.00	0.44++	1.00
PLANT HEIGHT	0.13	0.69++	0.05	0.29+	0.51++	0.51++	0.15	0.42++	0.37	0.23
LODGING	-0.12	0.81++	0.17	0.31+	0.55++	0.60++	-0.22	-0.15	-0.31	0.23
SHATTER	-0.16	-0.11	0.25	-0.32+	-0.26+	-0.01	-0.15	-0.15	-0.31	0.23
PLANTS HARVEST	0.10	0.96	0.21	-0.18	0.24	0.19	-0.15	-0.15	-0.31	0.23
PODS PER PLANT	0.30+	0.27+	0.24	0.14	0.24	0.23	-0.23	-0.23	-0.31	0.23
100 SEED WEIGHT	0.39++	-0.25	0.19	-0.10	-0.13	-0.21	-0.23	-0.23	-0.31	0.23
QUALITY OF SEED	0.35++	-0.26+	0.22	-0.19	-0.19	-0.25	-0.23	-0.23	-0.31	0.23

TABLE 173

EXPERIMENT 447

YEAR 1975

(CONTINUED)

INTEY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1L	CALLANI	1.00	172.50	32.00	19.10	3.00	42.4	22.0
9	FORREST	1.00	190.50	42.75	16.75	2.75	41.3	22.4
2	HAMPTON 266A	1.00	191.00	26.75	22.08	4.00	42.0	22.8
7	DAVIS	2.00	200.00	34.00	18.40	2.25	41.5	22.5
3	HARDEE	1.00	155.50	46.00	16.88	3.00	44.1	22.8
10	COLUMBUS	1.00	190.75	34.00	19.35	3.50	42.6	23.4
5	COEB	3.50	157.75	33.25	19.43	3.50	44.1	23.4
4	IMPROVED PELICAN	1.00	185.75	43.00	14.05	1.50	45.2	22.1
15	SEMMES	2.25	200.00	26.25	18.50	2.25	44.3	21.9
8	TRACY	2.25	189.25	27.25	19.40	2.75	42.7	22.2
1	JUPITER	1.00	190.00	34.00	17.00	2.25	42.6	22.0
11	CLARK 63	1.00	158.25	38.00	16.20	2.25	41.7	24.3
6	BOSSIER	1.50	180.00	34.00	19.63	3.25	46.6	21.5
13	WILLIAMS	1.00	186.75	25.75	17.60	2.25	42.7	24.3
12	WOODWORTH	1.25	177.50	31.50	15.90	2.25	40.9	23.9
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****=NS)								
C C R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.06	0.10	0.30+	0.39++	0.35++		
DAYS TO FLOWER		-0.11	0.06	0.27+	-0.25	-0.26+		
DAYS TO MATURITY		0.25	0.21	0.24	0.19	0.22		
NCDULE NUMBER 1		-0.32+	-0.18	0.14	-0.10	-0.19		
NCDULE NUMBER 2		-0.26+	-0.20	0.24	-0.13	-0.19		
NCDULE WEIGHT 1		-0.22	-0.01	0.19	-0.21	-0.25		
NCDULE WEIGHT 2		-0.15	-0.15	0.19	-0.23	-0.23		
PLANT HEIGHT		-0.42++	-0.01	0.36++	-0.48++	-0.34++		
LODGING		-0.23	0.07	0.23	-0.46++	-0.44++		
SHATTER		1.00	0.28+	-0.18	0.24	0.13		
PLANTS HARVEST		0.28+	1.00	-0.47++	0.21	0.06		
PODS PER PLANT		-0.18	-0.47++	1.00	-0.33++	-0.16		
100 SEED WEIGHT		0.24	0.21	-0.33++	1.00	0.64++		
QUALITY OF SEED		0.13	0.06	-0.16	0.64++	1.00		

TABLE 174

EXPERIMENT 133

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - SANTA CRUZ  
 COUNTRY - BOLIVIA  
 LATITUDE - 17 DEG. 14 MIN. S  
 ELEVATION - 320 M  
 COOPERATOR - HERBERT ZURITA O.  
 LONGITUDE - 63 DEG. 10 MIN. W  
 DATE PLANTED - DECEMBER 27, 1974  
 DATE HARVESTED - APRIL, 1975  
 SOIL PH 7.0  
 AMOUNT OF MOISTURE - 296 MM  
 NUMBER OF IFFICATIONS - 1 (52 MM)  
 SUBSTITUTE VARIETIES - PELICANO, ACADIAN

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODUL NUMBER 1	NODUL NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	LOGGING
1	JUPITER	2656.36	50.50	123.75	119.50	71.75	0.33	0.73	97.00	2.75
2	HAMPTON 266A	2537.17	31.25	113.50	359.50	242.50	1.41	1.58	54.50	1.00
7	DAVIS	2515.09	39.50	112.00	166.25	98.00	1.03	0.73	60.00	1.00
15	ACADIAN	2447.99	44.50	114.25	194.25	117.25	1.26	1.47	113.75	4.00
5	COBR	2337.13	37.25	122.00	166.50	133.00	0.46	0.76	88.75	3.00
8	TRACY	2327.97	28.50	108.00	216.50	139.50	0.85	0.93	46.00	1.00
9	FORREST	2247.12	32.25	110.00	91.25	59.50	0.27	0.33	48.50	1.00
13	WILLIAMS	2237.11	27.00	110.50	202.00	217.25	0.82	1.42	69.25	1.25
6	BOSSIER	2175.02	22.75	111.50	123.25	105.50	0.37	0.45	60.50	1.00
12	WOODWORTH	2156.26	27.75	108.00	161.75	67.25	0.74	0.46	69.50	1.00
3	HARDEE	1952.89	38.75	113.25	253.75	153.00	0.91	1.29	57.00	1.00
11	CLARK 63	1871.62	37.00	108.00	180.00	170.50	1.14	1.32	68.00	1.00
10	COLUMBUS	1844.95	23.25	108.00	186.75	106.25	0.82	0.85	58.75	1.00
14	PELICANO	1802.44	51.50	114.00	78.00	106.75	0.31	0.65	119.75	4.00
4	IMPROVED PELICAN	1641.99	40.25	117.50	88.75	63.25	0.42	0.42	110.00	3.00
	GRAND MEAN	2183.41	35.47	112.95	172.53	123.42	0.74	0.89	74.75	1.80
	STANDARD ERROR OF A VARIETY MEAN	261.43	3.06	2.05	34.53	34.26	0.24	0.28	4.36	0.17
	COEFFICIENT OF VARIATION	23.95%	17.26%	3.63%	40.02%	55.52%	64.62%	63.04%	11.67%	19.36%
	5% LSD VARIETY MEANS (*****=NS)	*****	8.75	5.86	98.68	97.92	0.69	0.80	12.47	0.50
C O R R E L A T I O N S (+ - PROB=-.05 ++ - PROB=-.01)										
YIELD	KG/HA	1.00	0.06	0.12	0.22	-0.07	0.06	-0.01	-0.06	-0.03
DAYS TO FLOWER		0.05	1.00	0.48++	-0.15	-0.17	-0.03	-0.00	0.63++	0.66++
DAYS TO MATURITY		0.12	0.48++	1.00	-0.21	-0.00	-0.27+	0.02	0.46++	0.47++
NODULE NUMBER 1		0.22	-0.15	-0.21	1.00	0.59++	0.73++	0.66++	-0.34++	-0.28+
NODULE NUMBER 2		-0.07	-0.17	-0.00	0.59++	1.00	0.40++	0.83++	-0.19	-0.15
NODULE WEIGHT 1		0.06	-0.03	-0.27+	0.73++	0.40++	1.00	0.60++	-0.18	-0.05
NODULE WEIGHT 2		-0.01	-0.00	0.02	0.66++	0.83++	0.60++	1.00	-0.05	-0.05
PLANT HEIGHT		-0.06	0.63++	0.46++	-0.34++	-0.19	-0.18	-0.05	1.00	0.89++
LOGGING		-0.03	0.66++	0.47++	-0.28+	-0.19	-0.15	-0.05	0.89++	1.00
SHATTER		-0.03	-0.28+	-0.26+	0.15	0.17	0.18	0.11	-0.30+	-0.34++
HARVEST		0.09	-0.31+	-0.17	0.09	-0.07	0.15	-0.09	-0.27+	-0.31+
PODS PER PLANT		0.21	0.42++	0.29+	0.04	-0.13	-0.06	0.05	0.14	0.26+
100 SEED WEIGHT		0.34++	0.11	0.31+	0.23	0.24	0.14	0.29+	0.08	0.10
QUALITY OF SEED		-0.07	-0.12	-0.24	-0.06	-0.07	-0.05	-0.14	-0.46++	-0.44++
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	103.00	64.05	15.75	3.00	42.8	24.1
2	HAMPTON 266A	1.00	139.25	44.43	14.75	2.75	40.9	23.5
7	DAVIS	1.50	131.50	48.93	12.50	3.00	40.5	23.1
15	ACADIAN	1.00	104.25	66.52	12.25	2.00	43.7	22.3
5	CORR	1.00	121.00	50.90	13.75	1.25	--	--
8	TRACY	2.25	121.00	43.08	15.00	3.00	43.9	20.4
9	PORREST	1.00	115.00	62.80	10.50	3.25	42.1	23.0
13	WILLIAMS	1.50	107.75	38.43	12.25	2.25	42.2	23.3
6	BOSSIER	1.00	138.25	46.35	12.50	2.75	43.7	23.1
12	WOODWORTH	2.00	118.50	40.03	11.50	2.75	--	--
3	HARDEE	1.25	94.75	77.30	12.75	2.75	42.6	22.6
11	CLARK 63	1.00	116.25	36.30	14.25	2.50	43.6	22.4
10	COLUMBUS	1.00	153.50	43.15	10.00	2.25	--	--
14	PELICANO	1.00	95.50	52.05	13.00	2.25	44.0	23.4
4	IMPROVED PELICAN	1.00	118.75	47.93	12.25	2.00	43.0	23.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.23	118.55	50.82	12.87	2.52		
COEFFICIENT OF VARIATION		0.13	8.00	4.87	0.55	0.25		
5% LSD VARIETY MEANS (*****=NS)		21.31%	13.50%	10.18%	8.50%	19.87%		
		0.38	22.96	13.93	1.56	0.71		
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	-0.03	0.09	0.21	0.34++	-0.07	0.00	0.00
DAYS TO FLOWER		-0.28+	-0.31+	0.42++	0.11	-0.12	0.00	0.00
DAYS TO MATURITY		-0.26+	-0.17	0.29+	0.23+	-0.24	0.00	0.00
NODULE NUMBER 1		0.15	0.09	0.04	0.23	-0.06	0.00	0.00
NODULE NUMBER 2		0.17	-0.07	-0.13	0.24	-0.07	0.00	0.00
NODULE WEIGHT 1		0.18	0.15	-0.06	0.14	-0.05	0.00	0.00
NODULE WEIGHT 2		0.11	-0.09	0.05	0.20+	-0.14	0.00	0.00
PLANT		-0.30+	-0.27+	0.14	0.08	-0.46++	0.00	0.00
LODGING		-0.34++	-0.31+	0.26+	0.10	-0.44++	0.00	0.00
SHATTER		1.00	0.10	-0.30+	0.06	0.15	0.00	0.00
HARVEST		0.10	1.00	-0.49++	-0.21	-0.02	0.00	0.00
PLANT		-0.30+	-0.49++	1.00	0.13	0.06	0.00	0.00
PODS PER		0.06	-0.21	0.13	1.00	0.02	0.00	0.00
100 SEED		0.15	-0.02	0.00	0.00	1.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 175 EXPERIMENT 448 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - SANTA CRUZ  
 LATITUDE - 17 DEG. 14 MIN. S  
 COOPERATOR - HERBERT ZURITA CVANDG  
 DATE PLANTED - DECEMBER 17, 1975  
 SOIL TYPE - SILTY ICAM, PH 6.4  
 FERTILIZER USED (KG/HA) - N 11.7, P 35.2, K 50.0  
 AMOUNT OF MOISTURE - 391 MM  
 LOCAL VARIETY - PELICANO

COUNTRY - BOLIVIA  
 ELEVATION - 320 M  
 LONGITUDE - 63 DEG. 10 MIN. W  
 DATE HARVESTED - MARCH, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	ICDGING
2	HAMPTON 266A	4283.77	41.00	106.00	183.25	220.00	0.00	0.00	0.00	51.25	1.00
7	DAVIS	4239.18	33.00	106.00	154.00	193.75	0.00	0.00	0.00	51.50	1.00
14	CALLAND	3994.13	29.00	91.00	89.50	109.50	0.00	0.00	0.00	60.50	1.00
3	HARDEE	3639.06	40.00	106.00	122.75	196.75	0.00	0.00	0.00	58.00	1.00
5	FORREST	3576.97	32.00	119.00	166.25	175.00	0.00	0.00	0.00	54.25	1.00
8	TRACY	3576.97	29.00	96.00	151.25	171.00	0.00	0.00	0.00	47.25	1.00
10	COLUMBUS	3514.04	29.00	96.00	105.00	126.00	0.00	0.00	0.00	49.25	1.00
5	COBB	3402.76	41.00	119.00	104.75	175.50	0.00	0.00	0.00	45.25	1.00
4	IMPROVED PELICAN	3166.05	57.00	119.00	61.75	63.25	0.00	0.00	0.00	102.75	1.75
6	BOSSIER	2934.34	40.00	119.00	111.00	162.50	0.00	0.00	0.00	59.50	1.00
1	JUPITER	2781.81	62.00	126.00	150.00	154.25	0.00	0.00	0.00	100.75	1.00
15	PELICANO	2713.88	60.00	119.00	80.75	119.00	0.00	0.00	0.00	104.00	1.75
13	WILLIAMS	2654.29	29.00	89.00	75.00	95.75	0.00	0.00	0.00	44.00	1.00
12	WOODWORTH	2446.74	29.00	89.00	55.25	37.00	0.00	0.00	0.00	45.25	1.00
11	CLARK 63	2242.53	29.00	89.00	96.25	46.75	0.00	0.00	0.00	45.75	1.00
GRAND MEAN											
3280.43											
STANDARD ERROR OF A VARIETY MEAN											
127.14											
COEFFICIENT OF VARIATION											
7.75%											
5% ISI VARIETY MEANS (*****=NS)											
362.86											
C O R R E L A T I O N S											
(* - PROE=.05 ** - PRCE=.01)											
YIELD	KG/HA	1.00	-0.17	0.06	0.35**	0.58**	0.00	0.00	0.00	-0.20	-0.20
DAYS TO FLOWER	0.06	-0.17	1.00	0.79**	-0.02	0.36	0.00	0.00	0.00	0.91**	0.57**
DAYS TO MATURITY	0.06	0.06	0.79**	1.00	0.19	0.34**	0.00	0.00	0.00	0.64**	0.33**
NODULE NUMBER 1	0.35**	-0.02	-0.02	0.19	1.00	0.56**	0.00	0.00	0.00	-0.13	-0.28*
NODULE NUMBER 2	0.58**	0.36	0.34**	0.56**	0.56**	1.00	0.00	0.00	0.00	-0.11	-0.26*
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
PLANT HEIGHT	-0.20	0.91**	0.64**	-0.13	-0.13	-0.11	0.00	0.00	0.00	1.00	0.65**
ICDGING	-0.20	0.57**	0.33**	-0.02	-0.02	-0.26*	0.00	0.00	0.00	0.65**	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.39**	0.06	0.17	0.00	0.00	0.23	0.00	0.00	0.00	-0.17	-0.21
PODS PER PLANT	0.14	0.16	0.02	-0.00	-0.00	0.10	0.00	0.00	0.00	0.16	0.25
100 SEED WEIGHT	0.54**	-0.52**	-0.27*	0.32*	0.32*	0.46**	0.00	0.00	0.00	-0.62**	-0.49**
QUALITY OF SEED	-0.52**	-0.25	-0.11	-0.01	-0.01	-0.23	0.00	0.00	0.00	-0.32*	-0.27*

TABLE 175 EXPERIMENT 448 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
2	HAMPTON 266A	1.00	194.75	42.98	20.00	2.00	38.6	28.1
7	DAVIS	1.00	221.00	38.18	16.50	2.00	40.9	24.3
14	CALLAND	1.00	164.00	35.68	18.00	2.00	41.6	24.4
3	HARREE	1.00	133.75	54.78	15.25	2.00	43.0	25.2
5	FORREST	1.00	173.25	37.65	15.50	3.00	41.8	24.6
8	TRACY	1.00	190.50	30.70	19.50	3.00	43.2	22.8
10	CCLOMBUS	1.00	173.50	36.40	18.00	2.00	43.3	25.6
5	COBB	1.00	212.00	28.88	18.25	3.25	44.1	25.6
4	IMPROVEL PELICAN	1.00	189.75	39.40	12.75	2.00	45.1	22.7
6	BOSSIER	1.00	181.25	32.85	18.25	3.00	45.8	22.8
1	JUPIER	1.00	191.75	32.23	13.50	2.75	44.2	23.1
15	PELICANO	1.00	113.50	45.50	13.50	2.00	44.2	22.6
13	WILLIAMS	1.00	172.25	37.10	16.00	2.00	42.3	26.0
12	WCCDORTH	1.00	149.75	35.23	15.00	3.75	38.3	28.1
11	CLARK 63	1.00	153.25	36.18	14.75	4.00	39.4	27.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	174.28	37.58	16.32	2.58		
COEFFICIENT OF VARIATION		0.00	11.56	2.51	0.33	0.11		
5% ISI VARIETY MEANS (*****NS)		0.00%	13.26%	13.35%	4.10%	8.31%		
		0.00	32.98	7.16	0.96	0.31		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.39++	0.14	0.54++	-0.52++		
DAYS TO FLOWER		0.00	-0.06	0.16	-0.52++	-0.25		
DAYS TO MATURITY		0.00	0.17	0.02	-0.27+	-0.11		
NODULE NUMBER 1		0.00	0.21	-0.00	0.32+	-0.01		
NODULE NUMBER 2		0.00	0.23	0.10	0.46++	-0.23		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		0.00	-0.17	0.16	-0.62++	-0.32+		
LC DGING		0.00	-0.21	0.25	-0.49++	-0.27+		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.47++	0.22	0.01		
PODS PER PLANT		0.00	-0.47++	1.00	-0.22	-0.37++		
100 SEED WEIGHT		0.00	0.27+	-0.22	1.00	-0.04		
QUALITY OF SEED		0.00	0.01	-0.37++	-0.04	1.00		

TABLE 176

EXPERIMENT 624

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - MANAUS  
 LATITUDE - 3 DEG. 8 MIN. S  
 COOPERATOR - FAZAL RAHMAN  
 DATE PLANTED - OCTOBER 16, 1975  
 SOIL TYPE - CLAY  
 FERTILIZER USED (KG/HA) - P 35.0, K 66.)  
 AMOUNT OF MOISTURE - 518 MM  
 LOCAL VARIETY - CRIENT

COUNTRY - BRAZIL

ELEVATION - 40 M  
 LONGITUDE - 60 DEG. 2 MIN. W

DATE HARVESTED - JANUARY, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	4567.58	32.00	111.00	219.00	331.00	2.80	4.40	84.67	1.50
13	WILLIAMS	2628.03	23.50	88.00	169.50	144.75	2.23	2.35	62.75	1.00
3	HARDIE	2609.69	26.50	95.50	168.75	211.50	1.93	4.05	46.95	1.00
4	IMPROVED PELICAN	2114.17	32.00	96.00	180.25	193.00	1.85	2.78	106.08	2.50
15	SEWIS	2052.91	25.00	100.50	216.50	231.00	2.83	3.33	30.13	1.00
10	CCUMBUS	1863.29	23.50	91.00	163.50	173.50	2.18	3.38	70.82	1.00
7	DAVIS	1821.20	23.75	100.75	116.75	147.75	2.65	3.38	35.83	1.00
11	CLARK 63	1513.64	23.50	88.25	167.25	118.75	2.45	2.35	65.52	1.00
2	HAMPTON 266A	1416.53	25.25	100.50	152.00	232.25	1.88	3.35	32.60	1.00
5	FORELST	1244.42	23.50	95.25	162.75	158.25	2.05	3.45	41.55	1.00
14	ORIENT	1237.33	60.75	127.75	259.00	368.00	2.40	4.15	125.28	5.00
8	TRACY	1056.46	26.00	89.25	97.75	109.75	1.68	2.08	35.48	1.00
12	WOODWORTH	958.95	23.25	82.50	96.00	98.75	1.90	1.80	56.13	1.00
6	BOSSIER	838.08	23.75	102.50	114.50	220.50	1.93	4.18	29.48	1.00
5	COBB	409.25	23.50	100.50	92.50	128.25	1.75	2.83	26.30	1.00
GRAND MEAN		1756.44	27.72	98.22	158.20	191.80	2.16	3.17	56.66	1.40
STANDARD ERROR OF A VARIETY MEAN		263.61	0.72	1.65	29.63	57.91	0.33	0.63	4.17	0.11
COEFFICIENT OF VARIATION		29.97%	5.17%	3.37%	37.46%	63.39%	33.80%	39.99%	14.72%	15.36%
5% ISI VARIETY MEANS (*****=NS)		752.36	2.05	4.72	84.57	*****	*****	*****	11.50	0.30

+ - PROBE=.05 + - FRCB=.01

C O R R E L A T I O N S

YIELD	KG/HA	1.00	0.07	0.12	0.27+	0.16	0.21	0.18	0.36++	-0.01
DAYS TO	FLOWER	0.07	1.00	0.78++	0.44++	0.40++	0.11	0.21	0.73++	0.95++
DAYS TO	MATURITY	0.12	0.78++	1.00	0.41++	0.47++	0.19	0.43++	0.36++	0.70++
NODULE	NUMBER 1	0.27+	0.44++	0.41++	1.00	0.08	0.69++	-0.06	0.42++	0.41++
NODULE	NUMBER 2	0.16	0.40++	0.38	0.08	1.00	-0.18	0.88++	0.23	0.39++
NODULE	WEIGHT 1	0.21	0.11	0.19	0.69++	-0.18	1.00	-0.15	0.39	0.16
NODULE	WEIGHT 2	0.18	0.21	0.43++	-0.06	0.88++	-0.15	1.00	0.03	0.16
PLANT	HEIGHT	0.36++	0.36++	0.36++	0.42++	0.23	0.09	0.16	0.78++	0.78++
LODGING	SHATTER	-0.01	0.95++	0.70++	0.41++	0.39++	0.04	0.16	0.78++	1.00
PIANTS	HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.54++	-0.18	-0.03	0.17	0.07	0.17	0.14	0.71++	0.93++
100 SEED	WEIGHT	-0.06	0.94++	0.69++	0.37++	0.33+	0.10	0.14	0.71++	0.93++
QUALITY	OF SEED	0.31+	-0.52++	-0.23	-0.08	-0.13	0.01	-0.01	-0.47++	-0.62++
		-0.40++	-0.50++	-0.41++	-0.19	-0.31+	-0.05	-0.28+	-0.64++	-0.53++

TABLE 176

EXPERIMENT 624

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATIFR	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPIER	0.00	183.75	56.52	22.50	1.00	43.6	25.3
13	WILLIAMS	0.00	176.25	36.15	21.05	3.00	43.4	25.5
3	HARDEE	0.00	172.25	35.00	20.53	3.25	43.9	25.6
4	IMPROVED PILICAN	0.00	172.00	59.60	16.00	1.00	45.7	24.1
15	SIMMS	0.00	177.50	31.53	15.75	3.25	45.1	22.8
10	COLUMBUS	0.00	150.50	38.20	20.80	2.50	46.1	23.1
7	DAVIS	0.00	196.25	39.40	20.90	3.00	46.3	22.7
11	CLARK 63	0.00	116.00	47.20	20.23	3.75	44.2	25.2
2	HAMPTON 266A	0.00	153.75	32.92	23.30	3.75	43.2	26.1
9	FOREST	0.00	197.50	34.65	16.48	2.50	44.1	23.8
14	ORIENT	0.00	87.75	137.80	14.30	1.50	49.4	20.4
8	TRACY	0.00	123.75	29.22	21.33	3.00	45.9	22.8
12	WCCDORTH	0.00	86.25	50.65	16.40	3.00	40.0	27.6
6	BCSSIER	0.00	168.75	28.35	19.38	3.25	48.1	23.4
5	CCBB	0.00	29.75	49.77	15.75	3.00	41.6	25.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% ISI VARIETY MEANS (*****=NS)								
C C R R E I A T I C N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD								
KG/HA								
DAYS TO FLOWER								
DAYS TO MATURITY								
NCDULE NUMBER 1								
NCDULE NUMBER 2								
NCDULE WEIGHT 1								
NCDULE WEIGHT 2								
PLANT								
HEIGHT								
LOGGING								
SHATIFR								
PLANTS								
HARVEST								
PODS PER								
PLANT								
100 SEED								
WEIGHT								
QUALITY								
OF SEED								

TABLE 177 EXPERIMENT 632 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - LA PLATINA  
 LATITUDE - 33 DEG. 34 MIN. S  
 COOPERATOR - H. GELDRES  
 DATE PLANTED - OCTOBER 14, 1975  
 FERTILIZER USED (KG/HA) - P 85.0  
 AMOUNT CP MOISTURE - 22 MM  
 NUMBER OF IRRIGATIONS - 8

COUNTRY - CHILE  
 ELEVATION - 625 M  
 LONGITUDE - 70 DEG. 30 MIN. W

DATE HARVESTED - FEBRUARY, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
5	AMSOY 71	4019.55	62.00	137.75	0.00	172.00	0.00	2.24	147.50	4.25
8	WELLS	3773.67	59.00	140.50	0.00	103.75	0.00	1.64	118.75	1.00
10	WOODWORTH	3675.73	77.25	153.25	0.00	38.50	0.00	0.45	121.25	1.75
12	CALLAND	3552.79	65.25	148.25	0.00	48.00	0.00	1.14	138.75	4.00
3	HARK	3436.10	58.25	142.25	0.00	81.00	0.00	1.18	120.00	2.50
11	WILLIAMS	3208.97	77.00	153.75	0.00	71.75	0.00	1.28	136.25	1.75
7	BFESCN	3025.60	61.75	146.00	0.00	56.00	0.00	0.90	106.25	2.25
6	CORSOY	2838.07	60.00	134.50	0.00	108.50	0.00	1.49	108.75	2.50
13	BONUS	2542.17	73.25	155.00	0.00	67.00	0.00	0.71	141.25	2.25
9	COLUMBUS	2442.15	69.00	172.00	0.00	68.25	0.00	0.97	126.25	1.00
1	ALTONA	2340.05	51.00	117.00	0.00	23.75	0.00	0.80	73.75	1.00
2	SWIFT	2173.35	59.50	132.50	0.00	94.75	0.00	1.14	90.00	1.00
4	HODGSON	1950.39	55.25	128.00	0.00	93.25	0.00	1.24	80.00	1.00
GRAND MEAN										
2998.36										
STANDARD ERROR OF A VARIETY MEAN										
304.01										
COEFFICIENT OF VARIATION										
20.28%										
5% LSD VARIETY MEANS (*****=NS)										
871.98										
C O R R E L A T I O N S										
{+ - PROB=.05      +- - PROB=.01}										
YIELD	KG/HA	1.00	0.21	0.18	0.00	0.14	0.00	0.21	0.52++	0.39++
DAYS TO FLOWER	0.21	1.00	0.68++	0.68++	0.00	-0.08	0.00	-0.11	0.53++	0.09
DAYS TO MATURITY	0.18	0.68++	1.00	1.00	0.00	-0.12	0.00	-0.18	0.57++	0.05
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.14	-0.08	-0.12	0.00	0.00	1.00	0.00	0.85++	-0.12	0.04
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.21	-0.11	-0.18	0.00	0.00	0.85++	0.00	1.00	-0.13	-0.05
PLANT HEIGHT	0.52++	0.53++	0.57++	0.00	-0.12	0.00	0.00	-0.13	1.00	0.61++
LOGGING	0.39++	0.09	0.05	0.00	0.04	0.00	0.00	-0.05	0.61++	1.00
SHATIER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.41++	0.45++	0.39++	0.00	0.18	0.00	0.00	0.22	0.49++	0.12
PLANTS PER 100 SEED	0.09	-0.11	0.15	0.00	0.08	0.00	0.00	-0.06	0.12	0.01
PLANT WEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 177 EXPERIMENT 632 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	AMSOY 71	0.00	221.75	40.92	0.00	0.00
8	WELLS	0.00	208.50	42.35	0.00	0.00
10	WOODWORTH	0.00	212.75	31.70	0.00	0.00
12	CALLAND	0.00	202.50	19.40	0.00	0.00
3	HARK	0.00	219.00	30.05	0.00	0.00
11	WILLIAMS	0.00	220.75	23.65	0.00	0.00
7	BEESON	0.00	192.50	32.28	0.00	0.00
6	CORSOY	0.00	204.00	47.48	0.00	0.00
13	BONUS	0.00	243.00	19.55	0.00	0.00
9	COLUMBUS	0.00	222.50	54.55	0.00	0.00
1	ALTONA	0.00	182.00	25.92	0.00	0.00
2	SWIFT	0.00	209.25	29.00	0.00	0.00
4	HODGSON	0.00	163.50	33.05	0.00	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	207.85	33.07	0.00	0.00
COEFFICIENT OF VARIATION		0.00%	11.23	4.00	0.00	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	10.80%	24.20%	0.00%	0.00%
		0.00	32.20	11.48	0.00	0.00
C O R R E L A T I O N S						
(* - PROB=.05    ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.41++	0.09	0.00	0.00
DAYS TO FLOWER		0.00	0.45++	-0.11	0.00	0.00
DAYS TO MATURITY		0.00	0.39++	0.15	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.18	0.08	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.22	-0.06	0.00	0.00
PLANT	HFIGHT	0.00	0.49++	0.12	0.00	0.00
	LODGING	0.00	0.12	0.01	0.00	0.00
	SHATTER	1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.08	0.00	0.00
PODS PER	PLANT	0.00	-0.08	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	1.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	1.00

TABLE 178 EXPERIMENT 611 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - ESPINAL TOLINA  
 LATITUDE - 4 DEG. N  
 COPEFATOR - O. CARDINAS G.  
 DATE PLANTED - SEPTEMBER 18, 1975  
 SOIL TYPE - SILT, PH 6.4  
 AMOUNT OF MOISTURE - 637 MM  
 NUMBER OF IRRIGATIONS - 2 (120 MM)  
 LOCAL VARIETIES - L.108, L.109

COUNTRY - COLOMBIA  
 ELEVATION - 400 M  
 LONGITUDE - 75 DEG. W  
 DATE HARVESTED - JANUARY, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
11	CLARK 63	3430.69	38.00	88.00	0.00	0.00	0.00	0.00	46.03	1.00
13	HARDEE	3425.68	36.25	95.00	0.00	0.00	0.00	0.00	22.83	1.00
13	WILLIAMS	3340.25	37.75	88.00	0.00	0.00	0.00	0.00	52.00	1.00
14	DAVIS	3334.00	37.75	94.50	0.00	0.00	0.00	0.00	25.00	1.00
14	L.108	3313.16	48.25	97.00	0.00	0.00	0.00	0.00	57.08	1.75
15	L.109	3169.38	47.75	97.00	0.00	0.00	0.00	0.00	61.20	1.50
10	COLUMBUS	3081.87	38.25	90.00	0.00	0.00	0.00	0.00	48.18	1.00
12	WOODWORTH	3047.28	36.25	82.75	0.00	0.00	0.00	0.00	42.75	1.00
1	JUPITER	2883.91	45.75	97.00	0.00	0.00	0.00	0.00	54.80	2.25
9	FORREST	2640.11	34.50	94.50	0.00	0.00	0.00	0.00	32.40	1.00
8	TRACY	2618.44	34.25	84.50	0.00	0.00	0.00	0.00	29.73	1.00
6	BOSSIER	2508.83	33.25	93.50	0.00	0.00	0.00	0.00	22.00	1.00
2	HAMPTON 266A	2058.74	32.50	98.50	0.00	0.00	0.00	0.00	22.85	1.00
4	IMPROVED PELICAN	1881.63	42.75	102.75	0.00	0.00	0.00	0.00	67.75	2.50
5	COBB	322.98	33.75	97.75	0.00	0.00	0.00	0.00	19.28	1.00
	GRAND MEAN	2737.13	38.47	93.38	0.00	0.00	0.00	0.00	40.26	1.27
	STANDARD ERROR OF A VARIETY MEAN	170.04	0.27	0.86	0.00	0.00	0.00	0.00	1.47	0.20
	COEFFICIENT OF VARIATION	12.42%	1.39%	1.84%	0.00%	0.00%	0.00%	0.00%	7.29%	31.84%
	5% LSD VARIETY MEANS (*****NS)	485.29	0.76	2.45	0.00	0.00	0.00	0.00	4.19	0.58
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.33++	-0.40++	0.00	0.00	0.00	0.00	0.31+	-0.05
DAYS TO FLOWER		0.33++	1.00	0.33+	0.00	0.00	0.00	0.00	0.82++	0.60++
DAYS TO MATURITY		-0.40++	0.33+	1.00	0.00	0.00	0.00	0.00	0.42++	0.42++
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT		0.31+	0.82++	0.09	0.00	0.00	0.00	0.00	1.00	0.56++
LODGING		-0.05	0.60++	0.42++	0.00	0.00	0.00	0.00	0.56++	1.00
SHATTER		0.14	-0.12	-0.02	0.00	0.00	0.00	0.00	-0.16	-0.15
PLANTS		0.42++	0.14	-0.14	0.00	0.00	0.00	0.00	0.35++	0.17
PODS PER		0.29+	0.57++	0.19	0.00	0.00	0.00	0.00	0.27+	0.18
100 SEED		-0.35++	-0.69++	-0.04	0.00	0.00	0.00	0.00	-0.74++	-0.40++
QUALITY		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE		-0.13	0.06	0.20	0.00	0.00	0.00	0.00	0.24	0.28+
DISEASE I		0.15	0.27+	0.16	0.00	0.00	0.00	0.00	0.11	0.15
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 178

EXPERIMENT 611

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
11	CLARK 63	1.00	202.75	37.23	17.53	0.00
3	HARDEE	1.00	90.00	66.95	19.85	0.00
13	WILLIAMS	1.00	251.00	32.60	18.58	0.00
7	DAVIS	1.50	238.25	37.85	19.43	0.00
14	L.108	1.00	193.50	70.02	13.03	0.00
15	L.109	1.00	188.50	61.20	12.53	0.00
10	COLUMBUS	1.50	207.75	33.80	17.23	0.00
12	WOODWORTH	1.00	185.25	37.35	16.65	0.00
1	JUPITER	1.00	234.25	46.13	19.48	0.00
9	PORREST	1.25	225.75	35.40	17.10	0.00
8	TRACY	1.25	247.75	32.23	17.68	0.00
6	BOSSIER	1.00	211.50	27.78	17.95	0.00
2	HAMPTON 266A	1.00	249.00	24.70	22.15	0.00
4	IMPROVED PELICAN	1.00	250.00	34.03	13.65	0.00
5	COBB	1.00	21.75	36.48	22.38	0.00
GRAND MEAN						
1.10 199.80 40.91 17.68 0.00						
STANDARD ERROR OF A VARIETY MEAN						
0.14 11.69 4.51 0.22 0.00						
COEFFICIENT OF VARIATION						
24.96% 11.71% 22.03% 2.45% 0.00%						
5% LSD VARIETY MEANS (*****=NS)						
***** 33.37 12.87 0.62 0.00						
C O R R E L A T I O N S						
(+ - PROB=-.05    +- - PROB=-.01)						
YIELD	KG/HA	0.14	0.42++	0.29+	-0.35++	0.00
DAYS TO FLOWER		-0.12	0.14	0.57++	-0.69++	0.00
DAYS TO MATURITY		-0.02	-0.14	0.19	-0.04	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.16	0.35++	0.27+	-0.74++	0.00
LODGING		-0.15	0.17	0.18	-0.40++	0.00
SHATTER		1.00	0.16	-0.18	0.07	0.00
PLANTS	HARVEST	0.16	1.00	-0.38++	-0.26+	0.00
PODS PER	PLANT	-0.18	-0.38++	1.00	-0.39++	0.00
100 SEED	WEIGHT	0.07	-0.26+	-0.39++	1.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00
DISEASE	I	0.09	0.10	-0.17	-0.12	0.00
DISEASE	II	-0.04	0.12	0.21	-0.43++	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00
					-0.36++	1.00
					0.00	0.00
					0.00	1.00

TABLE 179

EXPERIMENT 612

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - MOTILONIA  
 LATITUDE - 10 DEG. 2 MIN. N  
 COOPERATOR - JAIRO E. CUEJIA  
 DATE PLANTED - SEPTEMBER 15, 1975  
 SOIL TYPE - SAND 45%, SILT 10%, CLAY 45%, PH 6.2  
 AMOUNT OF MOISTURE - 888 MM

COUNTRY - COLOMBIA  
 ELEVATION - 339 M  
 LONGITUDE - 73 DEG. 13 MIN. W

DATE HARVESTED - DECEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2704.71	31.00	103.75	352.25	1111.25	0.00	0.00	54.75	1.00
9	FORREST	2700.54	25.50	96.75	267.75	745.25	0.00	0.00	31.25	1.00
7	DAVIS	2600.52	26.50	99.25	261.75	636.25	0.00	0.00	36.00	1.25
15	SEMMES	2546.34	25.75	100.50	346.50	1093.25	0.00	0.00	31.00	1.00
3	HARDEE	2467.16	29.75	101.00	402.00	966.00	0.00	0.00	38.25	1.00
13	WILLIAMS	2439.24	23.75	94.75	320.75	751.25	0.00	0.00	39.25	1.00
4	IMPROVED	2379.64	30.50	98.00	356.75	804.25	0.00	0.00	58.25	1.25
10	COLUMBUS	2354.64	24.25	96.50	286.75	656.75	0.00	0.00	46.75	1.00
2	HAMPTON 266A	2271.29	26.00	100.25	438.00	772.75	0.00	0.00	40.00	1.00
14	CALLAND	2229.61	24.00	94.00	308.25	517.25	0.00	0.00	44.00	1.00
8	TRACY	2129.59	24.50	96.25	235.50	456.75	0.00	0.00	48.00	1.00
6	BOSSIER	2083.75	24.00	98.00	375.00	679.00	0.00	0.00	34.50	1.00
12	WOODWORTH	1825.36	23.75	94.50	259.00	441.50	0.00	0.00	46.00	1.00
11	CLARK 63	1821.20	24.50	96.25	250.75	537.25	0.00	0.00	53.25	1.00
5	COBB	975.19	26.00	101.00	160.75	442.50	0.00	0.00	27.50	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05      +- - PROB=.01)										
YIELD	KG/HA	1.00	0.25+	0.13	0.37++	0.39++	0.00	0.00	0.11	0.07
DAYS TO FLOWER	0.25+	0.13	0.67++	0.17	0.49++	0.49++	0.00	0.00	0.18	0.12
DAYS TO MATURITY	0.13	0.67++	1.00	0.18	0.39++	0.39++	0.00	0.00	-0.03	-0.00
NODULE NUMBER 1	0.37++	0.17	0.18	1.00	0.36++	0.36++	0.00	0.00	-0.06	0.18
NODULE NUMBER 2	0.39++	0.49++	0.39++	0.36++	1.00	1.00	0.00	0.00	-0.10	0.04
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT	0.11	0.18	-0.03	-0.06	-0.10	-0.10	0.00	0.00	1.00	0.15
LODGING	0.07	0.12	-0.00	-0.00	0.04	0.04	0.00	0.00	0.15	1.00
SHATTER	-0.11	-0.20	-0.28+	-0.18	-0.30+	-0.30+	0.00	0.00	0.12	-0.06
HARVEST	0.54++	0.31+	0.31+	0.11	0.08	0.08	0.00	0.00	0.09	0.13
PODS PER PLANT	0.22	0.59++	0.45++	0.21	0.28+	0.28+	0.00	0.00	0.36++	0.32+
100 SEED WEIGHT	-0.06	0.05	-0.20	-0.12	-0.04	-0.04	0.00	0.00	0.11	0.01
QUALITY OF SEED	0.01	0.09	0.06	0.13	-0.03	-0.03	0.00	0.00	-0.11	0.02
DISEASE I	-0.07	-0.42++	0.01	0.01	-0.03	-0.03	0.00	0.00	-0.47++	-0.27+
DISEASE II	0.23	0.60++	0.54++	0.11	0.49++	0.49++	0.00	0.00	0.18	-0.06
DISEASE III	-0.03	0.08	-0.10	-0.17	-0.08	-0.08	0.00	0.00	0.23	0.24

TABLE 179 EXPERIMENT 612 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPIER	1.00	146.25	57.75	17.80	2.00	41.2	25.6
9	FORREST	1.00	142.00	40.25	18.53	3.00	43.7	23.5
7	DAVIS	1.00	149.25	33.00	16.25	2.00	43.4	23.5
15	SEMME	1.00	138.25	34.50	18.25	2.00	45.5	22.4
3	HARDFE	1.00	145.50	43.75	19.53	3.00	45.1	24.8
13	WILLIAMS	1.00	138.00	34.25	16.38	2.00	45.0	23.3
4	IMPROVED PELICAN	1.00	143.50	46.75	19.10	2.50	40.7	24.1
10	COLUMBUS	1.00	152.25	35.75	16.58	2.25	43.7	23.8
2	HAMPTON 266A	1.00	137.75	38.00	12.95	3.50	40.6	27.1
14	CALLAND	1.00	140.50	32.00	17.85	3.00	43.2	23.1
8	TRACY	2.00	133.25	34.75	20.93	2.75	45.4	22.1
6	BOSSIER	1.00	125.00	31.25	18.45	2.00	45.6	22.6
12	WOODWORTH	1.25	122.50	30.75	21.15	2.00	--	--
11	CLARK 63	1.00	118.00	33.50	16.80	2.00	42.5	25.3
5	COBB	1.00	138.00	40.00	17.30	2.75	39.6	27.6
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.08	138.00	37.75	17.85	2.45		
COEFFICIENT OF VARIATION		0.06	5.17	3.91	0.28	0.18		
5% LSD VARIETY MEANS (*****=NS)		11.92%	7.49%	20.72%	3.17%	14.99%		
		0.18	14.77	11.18	0.81	0.52		
C O R R E L A T I O N S								
		(+ - PROB=.05			++ - PROB=.01)			
YIELD	KG/HA	-0.11	0.54++	0.22	-0.06	0.01	-0.07	0.23
DAYS TO FLOWER		-0.20	0.31+	0.59++	0.05	0.09	-0.42++	0.60++
DAYS TO MATURITY		-0.28+	0.31+	0.45++	-0.20	0.06	0.01	0.54++
NODULE NUMBER 1		-0.18	0.11	0.21	-0.12	0.13	0.01	0.11
NODULE NUMBER 2		-0.30+	0.08	0.28+	-0.04	-0.04	-0.03	-0.08
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.12	0.09	0.36++	0.11	-0.11	-0.47++	0.18
LODGING		-0.06	0.13	0.32+	0.01	0.02	-0.27+	-0.06
SHATTER		1.00	-0.19	-0.10	0.46++	0.08	-0.02	-0.09
PLANTS	HARVEST	-0.19	1.00	0.26+	-0.21	0.21	-0.08	0.14
PODS PER	PLANT	-0.10	0.26+	1.00	0.05	0.16	-0.26+	0.50++
100 SEED	WEIGHT	0.46++	-0.21	0.05	1.00	-0.17	-0.34++	0.05
QUALITY	OF SEED	0.08	0.21	0.16	-0.17	1.00	0.27+	-0.13
DISEASE	I	-0.02	-0.08	-0.26+	-0.34++	0.27+	1.00	-0.39++
DISEASE	II	-0.09	0.14	0.50++	0.05	-0.13	-0.39++	1.00
DISEASE	III	-0.09	0.06	-0.10	-0.06	0.01	-0.27+	-0.04



TABLE 180 EXPERIMENT 500 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - TURIPANA  
 LATITUDE - 9 DEG. N  
 COOPERATOR - MIGUEL A. MUNOZ P.  
 DATE PLANTED - NOVEMBER 18, 1975  
 SOIL PH 6.8  
 AMOUNT OF MOISTURE - 128 MM

COUNTRY - COLOMBIA  
 ELEVATION - 13 M  
 LONGITUDE - 76 DEG. W  
 DATE HARVESTED - FEBRUARY, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	764.74	29.00	83.50	222.00	159.75	0.00	1.62	24.25	1.00
10	COLUMBUS	584.70	27.00	80.75	204.50	105.25	0.00	0.99	21.50	1.00
2	HAMPTON 266A	575.53	27.00	78.00	210.25	164.50	0.00	1.79	18.50	1.00
15	SEMMES	533.86	27.00	79.00	152.00	81.75	0.00	1.36	16.75	1.00
11	CIARK 63	514.69	27.00	84.75	224.75	167.75	0.00	2.07	26.00	1.00
13	WILLIAMS	484.26	27.00	81.00	147.00	84.50	0.00	1.03	18.75	1.00
7	DAVIS	473.43	27.00	76.00	160.25	114.50	0.00	1.85	22.25	1.00
6	BOSSIER	433.00	27.00	78.00	96.50	89.25	0.00	0.68	19.75	1.00
4	IMPROVED PELICAN	430.09	27.00	78.00	131.75	82.75	0.00	0.99	18.50	1.00
1	JUPITER	429.25	27.00	76.00	204.75	92.75	0.00	0.96	20.50	1.00
9	FORREST	428.00	29.00	82.50	130.25	99.00	0.00	0.89	23.50	1.00
14	CALLAND	398.00	27.00	80.00	152.25	75.00	0.00	0.78	25.00	1.00
12	WOODWORTH	381.74	27.00	80.75	171.25	97.50	0.00	1.08	21.50	1.00
8	TRACY	320.06	27.00	79.00	137.00	72.75	0.00	0.72	21.25	1.00
5	COBB	315.06	27.00	77.00	148.75	97.50	0.00	0.92	15.75	1.00
GRAND MEAN										
		471.09	27.27	79.62	166.22	105.63	0.00	1.18	20.92	1.00
STANDARD ERROR OF A VARIETY MEAN		118.68	0.00	2.81	35.64	32.58	0.00	0.44	3.15	0.00
COEFFICIENT OF VARIATION		50.39%	0.00%	7.06%	42.88%	61.68%	0.00%	74.27%	30.09%	0.00%
5% LSD VARIETY MEANS (*****=NS)										
		*****	0.00	*****	*****	*****	0.00	*****	*****	0.00
C O R R E L A T I O N S										
(+ - PROB=.05    +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		0.21	0.21	0.12	0.17	0.46++	0.00	0.48++	0.33++	0.00
DAYS TO MATURITY		0.21	1.00	0.22	0.03	0.15	0.00	0.03	0.19	0.00
NODULE NUMBER 1		0.12	0.22	1.00	-0.03	0.17	0.00	0.08	0.23	0.00
NODULE NUMBER 2		0.17	0.03	-0.03	1.00	0.22	0.00	0.07	-0.04	0.00
NODULE WEIGHT 1		0.46++	0.15	0.17	0.22	1.00	0.00	0.83++	0.06	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE HEIGHT		0.48++	0.03	0.08	0.07	0.83++	0.00	1.00	0.07	0.00
PLANT		0.33++	0.19	0.23	-0.04	0.06	0.00	0.07	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		-0.18	-0.09	-0.19	-0.08	-0.21	0.00	-0.22	0.04	0.00
PLANTS HARVEST		0.60++	0.07	0.21	0.26+	0.34++	0.00	0.35++	0.07	0.00
PODS PER PLANT		0.48++	0.22	0.39++	0.02	0.32+	0.00	0.27+	0.66++	0.00
100 SEED WEIGHT		0.34++	-0.02	-0.13	0.05	0.01	0.00	0.22	0.17	0.00
QUALITY OF SEED		-0.42++	0.07	0.09	-0.12	-0.07	0.00	-0.10	-0.10	0.00
DISEASE I		0.29+	0.36++	0.44++	-0.10	0.11	0.00	0.15	0.38++	0.00
DISEASE II		0.02	-0.04	-0.00	0.16	0.05	0.00	0.05	-0.19	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 180 EXPERIMENT 500 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
3	HARDEE	1.50	97.50	16.55	17.25	2.75	43.8	25.3
10	COLUMBUS	2.25	88.75	17.90	16.70	3.25	44.5	23.1
2	HAMPTON 266A	1.75	100.50	11.15	16.63	2.50	44.8	24.1
15	SEMME	2.25	58.75	13.35	17.25	2.50	42.9	23.1
11	CLARK 63	2.25	85.50	24.85	14.13	3.25	42.3	23.8
13	WILLIAMS	1.75	96.75	14.43	15.25	2.75	42.0	24.4
7	DAVIS	1.75	65.75	11.83	16.00	2.75	43.0	23.9
6	BOSSIER	2.00	67.50	11.23	16.25	3.50	45.4	22.8
4	IMPROVED PELICAN	2.00	73.25	11.50	15.63	2.50	42.2	25.1
1	JUPITER	2.50	73.75	10.70	15.50	3.00	43.8	23.3
9	FORREST	2.00	67.00	19.00	13.95	3.25	43.0	22.7
14	CALLAND	2.00	66.50	14.68	16.38	3.00	47.5	20.4
12	WOODWORTH	1.25	63.25	11.78	14.75	2.75	45.8	20.3
8	TRACY	2.00	70.00	12.08	16.50	2.50	45.1	20.1
5	COBB	1.50	58.25	9.72	13.93	3.00	41.8	24.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.92	75.53	14.05	15.74	2.88		
COEFFICIENT OF VARIATION		0.40	19.59	2.88	1.05	0.32		
5% LSD VARIETY MEANS (*****=NS)		41.31% *****	51.87% *****	40.98% *****	13.37% *****	22.49% *****		
C O R R E L A T I O N S								
				(+ - PROB=.05		+ + - PROB=.01)		
YIELD	KG/HA	-0.18	0.60++	0.48++	0.34++	-0.42++	0.29+	0.00
DAYS TO	FLOWER	-0.09	0.07	0.22	-0.02	0.07	0.35++	-0.04
DAYS TO	MATURITY	-0.19	0.21	0.39++	-0.13	0.09	0.44++	-0.00
NODULE	NUMBER 1	-0.08	0.26+	0.02	0.05	-0.12	-0.10	0.00
NODULE	NUMBER 2	-0.21	0.34++	0.32+	0.01	-0.07	0.11	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	-0.22	0.35++	0.27+	0.22	-0.10	0.15	0.00
PLANT	HEIGHT	0.04	0.07	0.66++	0.17	-0.10	0.38++	-0.19
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	-0.11	0.06	-0.11	0.19	-0.08	0.10
PLANTS	HARVEST	-0.11	1.00	0.18	0.20	-0.26+	0.10	0.00
PODS PER	PLANT	0.06	0.18	1.00	-0.12	-0.07	0.52++	-0.00
100 SEED	WEIGHT	-0.11	0.20	-0.12	1.00	-0.14	0.05	0.00
QUALITY	OF SEED	0.19	-0.26+	-0.07	-0.14	1.00	0.16	0.00
DISEASE	I	-0.08	0.10	0.52++	0.05	0.16	1.00	-0.09
DISEASE	II	0.10	0.25	-0.00	0.01	0.20	-0.09	1.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 181 EXPERIMENT 328 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - ECUADOR  
 SITE - FOLICHE ELEVATION - 17 M  
 LATITUDE - 2 DEG. 21 MIN. S LONGITUDE - 79 DEG. 49 MIN. W  
 COOPERATOR - I.N.I.A.P. DATE HARVESTED - SEPTEMBER, 1975  
 DATE PLANTED - MAY 16, 1975  
 SOIL TYPE - SAND 45%, SILT 25%, CLAY 30%, PH 6.5  
 AMOUNT OF MOISTURE - 105 MM  
 NUMBER OF IRRIGATIONS - 2  
 LOCAL VARIETY - AMERICANA

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	MGDULF WEIGHT 2	PLANT HEIGHT	YODGING
1	JUPITER	3793.68	35.00	129.00	69.25	144.75	1.00	2.05	2.05	78.27	3.25
4	IMPROVED PELICAN	3116.04	33.50	106.25	91.75	241.00	1.13	3.43	3.43	67.70	1.25
7	DAVIS	2776.39	30.00	123.75	58.00	194.00	2.60	4.23	4.23	33.36	1.00
15	AMERICANA	2728.88	30.00	108.00	100.50	232.00	1.98	4.75	4.75	66.75	2.00
2	HAMETON 266A	2454.24	27.75	123.75	38.75	108.00	0.55	1.50	1.50	29.43	1.00
10	COLUMBUS	2275.45	25.25	102.75	27.75	151.50	0.50	2.73	2.73	39.05	1.00
6	BOSSIER	2162.52	33.50	129.00	48.00	94.50	0.57	1.33	1.33	40.10	1.25
9	FORREST	2084.58	28.00	118.50	27.25	139.25	0.33	1.78	1.78	36.18	1.00
5	COBB	2032.49	26.75	108.50	30.00	116.25	0.35	1.25	1.25	26.45	1.00
14	CALLAND	1976.65	25.00	104.50	19.75	85.25	0.38	1.65	1.65	34.68	1.00
11	CLARK 63	1872.04	25.00	101.00	21.25	115.75	0.25	2.23	2.23	33.33	1.00
13	WILLIAMS	1806.61	25.00	101.00	18.25	66.75	0.35	1.15	1.15	34.27	1.00
8	TRACY	1589.07	26.50	101.00	23.25	129.50	0.45	1.88	1.88	28.93	1.00
12	WOODWORTH	1441.54	25.00	101.00	18.00	82.75	0.35	1.33	1.33	29.60	1.00
3	HARDEE	1429.87	32.25	113.25	3.00	7.50	0.23	0.26	0.26	30.58	1.00
GRAND MEAN		2236.00	28.57	111.42	39.65	127.25	0.73	2.10	2.10	40.58	1.25
STANDARD ERROR OF A VARIETY MEAN		194.77	0.25	3.14	14.38	30.86	0.23	0.42	0.42	4.54	0.15
COEFFICIENT OF VARIATION		17.42%	1.73%	5.63%	72.52%	48.50%	77.22%	40.07%	40.07%	13.01%	24.06%
5% LSD VARIETY MEANS (*****=NS)		556.69	0.70	8.96	41.09	88.20	0.81	1.20	1.20	7.54	0.43
C O R R E L A T I O N S (+ - PROB=-.05 ** - PROB=-.01)											
YIELD	KG/HA	1.00	0.54**	0.43**	0.63**	0.54**	0.42**	0.53**	0.53**	0.75**	0.58**
DAYS TO FLOWER		0.54**	1.00	0.61**	0.44**	0.19	0.32*	0.13	0.13	0.62**	0.54**
DAYS TO MATURITY		0.43**	0.61**	1.00	0.21	0.04	0.21	0.08	0.08	0.12	0.33**
NODULE NUMBER 1		0.63**	0.44**	0.21	1.00	0.70**	0.64**	0.64**	0.64**	0.63**	0.29*
NODULE NUMBER 2		0.54**	0.19	0.09	0.70**	1.00	0.53**	1.00	0.53**	0.47**	0.18
NODULE WEIGHT 1		0.42**	0.32*	0.21	0.64**	0.53**	1.00	0.72**	1.00	0.72**	0.17
NODULE WEIGHT 2		0.52**	0.13	0.08	0.68**	0.87**	0.72**	1.00	1.00	0.44**	0.18
PLANT HEIGHT		0.75**	0.62**	0.18	0.60**	0.47**	0.39*	0.44**	0.44**	1.00	0.73**
YODGING		0.58**	0.54**	0.33**	0.29*	0.18	0.17	0.18	0.18	0.73**	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS		-0.03	-0.18	-0.04	-0.13	0.01	-0.06	0.03	0.03	-0.25	-0.09
POLS PER PLANT		0.64**	0.23	-0.06	0.43**	0.35**	0.06	0.24*	0.24*	0.71**	0.45**
100 SEED WEIGHT		0.53**	0.18	0.43**	0.33**	0.22	0.35**	0.34**	0.34**	0.37**	0.52**
QUALITY OF SEED		-0.29*	-0.33**	-0.07	-0.23	-0.23	-0.16	-0.16	-0.16	-0.36**	-0.12
DISEASE I		-0.39**	-0.46**	0.03	-0.38**	-0.36**	-0.34**	-0.34**	-0.34**	-0.58**	-0.32*
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 181 EXPERIMENT 328 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	1.00	196.00	29.53	28.80	1.75	45.0	19.7
4	IMPROVED PELICAN	1.00	198.50	27.90	19.00	1.00	46.4	19.5
7	DAVIS	1.00	198.50	16.78	24.68	2.00	43.9	19.6
15	AMERICANA	1.00	196.00	21.70	27.43	1.75	47.3	18.6
2	HAMPTON 266A	1.00	197.50	16.08	26.10	2.00	44.1	21.1
10	COLUMBUS	1.00	199.50	22.63	22.38	2.25	45.9	20.6
6	BOSSIER	1.00	199.00	17.13	23.05	1.75	45.3	20.8
9	FORREST	1.00	195.50	22.10	19.23	1.00	42.0	21.4
5	COBB	1.00	198.00	16.68	20.30	2.25	43.9	21.6
14	CALLAND	1.00	199.00	17.00	25.48	3.75	44.1	20.4
11	CLARK 63	1.00	199.50	23.13	20.33	2.25	42.4	21.3
13	WILLIAMS	1.00	199.50	19.60	23.38	1.75	42.3	21.6
8	TRACY	1.00	198.50	18.00	21.73	2.00	40.2	20.9
12	WOODWORTH	1.00	199.50	19.53	18.63	2.00	39.5	21.8
3	HARDEF	1.00	198.00	15.38	17.73	2.25	39.6	22.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C C R E L A T I O N S								
(* - PROB=.05 ** - PROB=.01)								
YIELD	KG/HA	0.00	-0.03	0.64**	0.53**	-0.29*	-0.39**	0.00
DAYS TO FLOWER		0.00	-0.18	0.23	0.18	-0.33**	-0.46**	0.00
DAYS TO MATURITY		0.00	-0.04	-0.08	0.43**	-0.07	0.08	0.00
NODULE NUMBER 1		0.00	-0.13	0.43**	0.33**	-0.23	-0.38**	0.00
NODULE NUMBER 2		0.00	0.01	0.35**	0.22	-0.23	-0.36**	0.00
NODULE WEIGHT 1		0.00	-0.06	0.06	0.35**	-0.15	-0.34**	0.00
NODULE WEIGHT 2		0.00	0.03	0.29*	0.34**	-0.12	-0.39**	0.00
PLANT HEIGHT		0.00	-0.25	0.71**	0.37**	-0.36**	-0.58**	0.00
LODGING		0.00	-0.09	0.45**	0.52**	-0.12	-0.32*	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.09	-0.07	0.14	0.17	0.00
PLANT WEIGHT		0.00	-0.09	1.00	0.04	-0.41**	-0.50**	0.00
100 SEED WEIGHT		0.00	-0.07	0.04	1.00	0.25*	0.09	0.00
QUALITY OF SEED		0.00	0.14	-0.41**	0.26*	1.00	0.47**	0.00
DISEASE I		0.00	0.17	-0.50**	0.09	0.47**	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	1.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 182 EXPERIMENT 331

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - FALAITANGA  
 LATITUDE - 1 DEG. 59 MIN. S  
 COOPERATOR - I.N.I.A.P.  
 DATE PLANTED - MAY 19, 1975  
 LOCAL VARIETY - AMERICANA

COUNTRY - ECUADOR  
 ELEVATION - 3 M  
 LONGITUDE - 78 DEG. 53 MIN. W

DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOADING
6	BOSSIER	1496.13	0.00	0.00	0.00	0.00	0.00	0.00	45.75	1.00
7	DAVIS	1406.24	0.00	0.00	0.00	0.00	0.00	0.00	31.75	1.00
13	WILLIAMS	1379.48	0.00	0.00	0.00	0.00	0.00	0.00	29.50	1.00
3	HARDEE	1132.52	0.00	0.00	0.00	0.00	0.00	0.00	41.50	1.00
1	JUPITER	1125.60	0.00	0.00	0.00	0.00	0.00	0.00	62.00	2.25
9	FORREST	1068.17	0.00	0.00	0.00	0.00	0.00	0.00	41.25	1.00
2	HAMPTON 266A	1043.58	0.00	0.00	0.00	0.00	0.00	0.00	27.00	1.00
8	TRACY	930.69	0.00	0.00	0.00	0.00	0.00	0.00	22.00	1.00
5	COBB	915.93	0.00	0.00	0.00	0.00	0.00	0.00	24.25	1.00
4	IMPROVED PELICAN	776.66	0.00	0.00	0.00	0.00	0.00	0.00	25.50	1.50
10	COLUMBUS	748.36	0.00	0.00	0.00	0.00	0.00	0.00	32.00	1.75
12	WOODWORTH	641.92	0.00	0.00	0.00	0.00	0.00	0.00	25.50	1.50
11	CLARK 63	461.51	0.00	0.00	0.00	0.00	0.00	0.00	31.75	2.25
14	CALLAND	460.18	0.00	0.00	0.00	0.00	0.00	0.00	25.50	1.75
15	AMERICANA	395.45	0.00	0.00	0.00	0.00	0.00	0.00	49.50	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C C R R E L A T I O N S										
(+ - PROD=.05      + - PROD=.01)										
YIELD	KG/HA	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	-0.45**
DAYS TO FLOWER	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
PLANT HEIGHT	0.11	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
LOADING	-0.45**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.43**
SHATTER	0.36**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT WEIGHT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	-0.30+
POLS PER 100 SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED	-0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.12	0.11
DISEASE I	-0.31+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.19	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



TABLE 182 EXEFFMENT 331 YFAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	BOSSIER	1.00	194.25	0.00	15.95	2.50
7	DAVIS	1.00	198.50	0.00	19.15	2.25
13	WILLIAMS	1.00	200.00	0.00	19.83	1.50
3	HARDEE	1.00	197.75	0.00	15.93	2.75
1	JUPITER	1.00	190.25	0.00	15.88	2.25
9	FORREST	1.00	195.75	0.00	17.58	1.50
2	HAMPTON 266A	1.00	192.50	0.00	18.30	2.50
8	TRACY	1.00	180.75	0.00	13.50	2.00
5	COBB	1.00	189.50	0.00	19.23	3.00
4	IMPROVED PELICAN	1.00	198.25	0.00	16.60	1.75
10	COLUMBUS	1.00	187.75	0.00	18.63	2.75
12	WOODWORTH	1.00	189.25	0.00	16.93	2.25
11	CLARK 63	1.00	182.75	0.00	17.45	1.50
14	CALLAND	1.00	195.00	0.00	17.95	2.75
15	AMERICANA	1.00	194.50	0.00	19.58	3.50
GRAND MEAN						
		1.00	192.45	0.00	17.50	2.32
STANDARD ERROR OF A VARIETY MEAN						
		0.00	3.74	0.00	1.19	0.40
COEFFICIENT OF VARIATION						
		0.00%	3.88%	0.00%	34.65%	
5% LSD VARIETY MEANS (*****=NS)						
		0.00	10.68	0.00	3.40	1.15
C O R R E L A T I O N S						
(+ - PROP=.05      +- - PROP=.01)						
YIELD	KG/HA	0.00	0.36**	0.00	0.00	-0.17
DAYS TO	FLOWER	0.00	0.00	0.00	0.00	0.00
DAYS TO	MATURITY	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.14	0.00	0.00	0.00
	LODGING	0.00	-0.30+	0.00	-0.12	0.01
	SHATTER	1.00	0.00	0.00	0.00	0.03
PLANTS	HARVEST	0.00	1.00	0.00	0.12	0.02
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.12	0.00	1.00	0.12
QUALITY	OF SEED	0.00	0.02	0.00	0.12	1.00
DISEASE	I	0.00	-0.02	0.00	0.22	0.34**
DISEASE	II	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00

TABLE 183 EXPERIMENT 130 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - ECUADOR  
 SITE - FICHILINGUE ELEVATION - 73 M  
 LATITUDE - 1 DEG. 6 MIN. S LONGITUDE - 79 DEG. 29 MIN. W  
 COOPERATOR - I.N.I.A.P. DATE HARVESTED - SEPTEMBER, 1975  
 DATE PLANTED - JUNE 4, 1975  
 SOIL TYPE - SAND 31%, SILT 45%, CLAY 24%, PH 6.5  
 AMOUNT OF MOISTURE - 57 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	3473.61	38.00	110.00	22.00	70.50	0.18	0.46	96.20	3.25
6	BOSSIER	2959.88	37.00	98.00	24.25	89.75	0.20	0.85	68.35	2.75
10	COLUMBUS	2923.79	28.00	94.00	25.50	61.25	0.25	0.90	70.57	1.50
4	IMPROVED PELICAN	2756.84	36.00	96.00	33.50	71.75	0.25	0.68	91.75	3.00
7	DAVIS	2662.24	32.00	98.00	34.75	101.75	0.50	1.23	48.60	2.00
14	CALLAND	2647.15	28.00	91.00	28.75	48.00	0.46	1.10	61.55	1.25
2	HAMPTON 266A	2611.06	32.00	96.00	33.50	57.00	0.33	0.86	44.28	1.50
5	COBB	2518.00	32.00	94.00	34.50	98.00	0.42	0.84	41.88	1.25
11	CLARK 63	2461.95	28.00	94.00	28.25	109.00	0.42	1.01	59.63	1.00
3	HARDEE	2420.40	34.00	96.00	6.00	21.75	0.03	0.23	52.13	1.00
13	WILLIAMS	2411.69	28.00	91.00	40.75	103.25	0.73	1.11	55.70	1.00
9	FORREST	2389.89	32.00	96.00	22.75	81.25	0.16	0.73	47.33	1.50
8	TRACY	1925.80	30.00	82.00	23.00	47.25	0.35	0.84	40.83	2.00
12	WOODWORTH	1890.42	28.00	80.00	25.75	37.25	0.25	0.45	47.50	2.00
15	SEMME	1552.56	34.00	118.00	24.25	126.50	0.18	0.95	37.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****NS)										
C C R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.34++	0.15	0.12	0.02	-0.03	0.03	0.69++	0.61++
DAYS TO FLOWER	1.00	0.34++	1.00	0.63++	-0.14	0.05	-0.35++	-0.23	0.41++	0.58++
DAYS TO MATURITY	0.15	0.63++	1.00	0.63++	-0.06	0.26+	-0.21	0.01	0.19	0.17
NODULE NUMBER 1	0.12	-0.14	-0.06	1.00	0.49++	0.49++	0.82++	0.53++	-0.07	0.09
NODULE NUMBER 2	0.02	0.05	0.26+	0.49++	1.00	0.37++	0.37++	0.78++	-0.15	-0.00
NODULE WEIGHT 1	-0.03	-0.35++	-0.21	0.82++	0.37++	1.00	1.00	0.55++	-0.21	-0.19
NODULE WEIGHT 2	0.03	-0.23	0.01	0.53++	0.78++	0.78++	0.55++	1.00	-0.24	-0.08
PLANT HEIGHT	0.69++	0.41++	0.19	-0.07	-0.15	-0.21	-0.21	-0.24	1.00	0.57++
LODGING	0.61++	0.58++	0.17	0.09	-0.00	-0.00	-0.19	-0.08	0.57++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	-0.21	-0.31+	-0.35++	-0.05	-0.06	-0.06	0.07	0.08	-0.17	-0.33++
PODS PER PLANT	0.70++	0.56++	0.28+	-0.08	-0.09	-0.29+	-0.29+	-0.25+	0.85++	0.72++
100 SEED WEIGHT	0.11	0.20	0.67++	0.27+	0.38++	0.17	0.38++	0.38++	-0.11	0.03
QUALITY OF SEED	-0.02	-0.14	0.35++	0.05	0.23	0.07	0.27+	0.27+	-0.33++	-0.34++
DISEASE I	-0.12	-0.22	0.33++	0.27+	0.39++	0.28+	0.28+	0.32+	-0.37++	-0.37++
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 183 EXPEEFIMENT 330 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HAPFS	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPTER	1.00	190.00	45.53	24.90	2.25	42.9	22.1
6	BOSSIER	1.00	200.00	26.43	22.35	2.50	40.6	22.5
10	COLUMBUS	1.00	200.00	25.43	22.35	4.00	42.2	22.5
4	IMPROVED PELICAN	1.00	200.00	36.08	20.10	1.00	42.9	22.5
7	DAVIS	1.00	198.50	18.98	23.33	2.50	40.4	21.9
14	CALLAND	1.00	200.00	16.33	23.88	4.25	41.4	22.0
2	HAMETCN 266A	1.00	200.00	17.25	25.65	3.50	39.4	23.2
5	CORB	1.00	200.00	17.73	22.68	4.00	37.6	24.8
11	CLARK 63	1.00	200.00	21.20	20.93	3.25	41.4	22.8
3	HARDEF	1.00	200.00	19.53	19.68	3.00	40.5	23.1
13	WILLIAMS	1.00	200.00	16.73	23.90	2.00	40.2	23.2
9	PORREST	1.00	195.25	20.08	21.03	2.50	40.1	22.6
8	TRACY	1.00	200.00	14.85	20.00	2.00	37.1	22.0
12	WOODWORTH	1.00	199.00	19.33	17.50	1.50	35.2	24.3
15	SEMMES	1.00	197.25	13.45	30.10	5.00	44.6	21.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.21	0.70++	0.11	-0.02	-0.12	0.00
DAYS TO	FLCWR	0.00	-0.31+	0.56++	0.20	-0.14	-0.22	0.00
DAYS TO	MATURITY	0.00	-0.35++	0.28+	0.67++	0.35++	0.33++	0.00
NODULE	NUMBER 1	0.00	-0.05	-0.08	0.27+	0.05	0.27+	0.00
NODULE	NUMBER 2	0.00	-0.06	-0.09	0.38++	0.23	0.33++	0.00
NODULE	WEIGHT 1	0.00	0.07	-0.29+	0.17	0.07	0.28+	0.00
NODULE	WEIGHT 2	0.00	0.08	-0.25+	0.38++	0.27+	0.32+	0.00
PLANT	HEIGHT	0.00	-0.17	0.85++	-0.11	-0.33++	-0.37++	0.00
LODGING		0.00	-0.33++	0.72++	0.03	-0.34++	-0.37++	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.42++	-0.23	-0.03	0.02	0.00
PODS PER	PLANT	0.00	-0.42++	1.00	-0.03	-0.31+	-0.30++	0.00
100 SEED	WEIGHT	0.00	-0.23	-0.03	1.00	0.59++	0.56++	0.00
QUALITY	OF SEED	0.00	-0.93	-0.31+	0.50++	1.00	0.67++	0.00
DISEASE	I	0.00	0.02	-0.36++	0.56++	0.67++	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 184 EXPERIMENT 329 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - PORTOVIEJO  
 LATITUDE - 1 DEG. 4 MIN. S  
 COOPERATOR - I.N.I.A.P.  
 DATE PLANTED - AUGUST 22, 1975  
 SOIL PH 7.0  
 AMOUNT OF MOISTURE - 319 MM  
 NUMBER OF IRRIGATIONS - 5  
 LOCAL VARIETY - AMERICANA

COUNTRY - ECUADOR  
 ELEVATION - 30 M  
 LONGITUDE - 80 DEG. 27 MIN. W  
 DATE HARVESTED - NOVEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
10	COLUMBUS	4399.67	26.25	98.00	30.50	42.50	0.34	0.69	64.55	1.75
14	CALLAND	4119.99	26.00	101.00	28.25	34.75	0.31	0.97	56.33	1.50
4	IMPROVED PELICAN	3788.05	33.50	98.00	20.00	44.25	0.23	0.62	87.37	3.75
7	DAVIS	3736.04	32.50	99.00	22.00	29.50	0.33	0.79	40.15	1.25
5	COBB	3689.20	29.25	97.00	40.75	69.00	0.39	1.02	29.58	1.25
2	HAMPTON 266A	3676.94	29.75	95.00	19.00	56.25	0.16	0.76	32.28	1.00
3	HARDEE	3480.53	33.25	102.00	14.00	9.00	0.16	0.18	40.08	1.25
1	JUPITER	3306.58	36.00	115.00	92.00	46.00	0.77	1.28	84.05	3.50
11	CLARK 63	3061.57	26.00	90.00	18.25	31.75	0.21	0.44	46.95	1.25
15	AMERICANA	3029.56	31.00	103.00	10.50	58.00	0.13	0.73	78.98	1.00
6	BOSSIER	2901.87	34.25	98.25	24.25	44.00	0.37	0.83	36.03	1.75
8	TRACY	2885.91	27.00	87.00	38.50	44.50	0.35	1.05	35.98	1.25
12	WOODWORTH	2794.10	26.25	87.00	16.25	21.00	0.20	0.43	44.63	1.00
9	FORREST	2791.97	31.00	98.00	16.75	15.00	0.18	0.26	31.70	1.00
13	WILLIAMS	2699.04	26.50	89.50	26.25	44.50	0.24	0.85	39.48	1.00
	GRAND MEAN	3357.40	29.90	97.18	27.82	39.33	0.29	0.73	49.87	1.57
	STANDARD ERROR OF A VARIETY MEAN	268.83	0.64	1.16	10.17	15.01	0.06	0.21	3.25	0.21
	COEFFICIENT OF VARIATION	16.01%	4.28%	2.38%	73.15%	76.35%	43.38%	56.96%	13.05%	27.27%
	5% LSD VARIETY MEANS (*****=NS)	768.36	1.83	3.30	29.08	*****	0.18	0.59	9.30	0.61
CORRELATIONS (+ - PROB=.05    +- - PROB=.01)										
	YIELD	1.00								
	DAYS TO FLOWER	-0.04	1.00							
	DAYS TO MATURITY	0.23	-0.04	1.00						
	NODULE NUMBER 1	0.04	0.62++	0.23	1.00					
	NODULE NUMBER 2	0.09	0.62++	0.35++	0.22	1.00				
	NODULE WEIGHT 1	0.26+	-0.05	0.02	0.23	0.85++	1.00			
	NODULE WEIGHT 2	0.04	0.30+	0.39++	0.23	0.85++	0.19	1.00		
	NODULE WEIGHT 2	0.23	0.03	0.14	0.33++	0.74++	0.22	0.42++	1.00	
	PLANT	0.31+	0.26+	0.50++	0.22	0.13	0.22	0.14	1.00	
	HEIGHT	0.29+	0.45++	0.46++	0.30+	0.08	0.30+	0.13	0.67++	
	LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	PLANTS	0.62++	-0.11	0.00	0.25	0.31+	0.18	0.34++	0.26+	
	PODS PER PLANT	0.04	0.52++	0.46++	0.00	-0.00	0.02	-0.17	0.74++	
	100 SEED WEIGHT	0.28+	-0.07	0.27+	0.20	0.21	0.19	0.30+	-0.10	
	QUALITY OF SEED	0.35++	-0.20	0.33++	0.20	0.12	0.18	0.30+	0.21	
	DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

TABLE 184 EXPERIMENT 329 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
10	COLUMBUS	1.00	196.50	36.63	21.98	2.00	43.7	21.5
14	CALLAND	1.00	177.00	29.15	25.40	4.00	43.1	20.8
4	IMPROVED PELICAN	1.00	192.50	57.65	16.85	1.00	43.5	22.5
7	DAVIS	1.00	193.75	27.75	20.55	1.25	39.4	23.0
5	COBB	1.00	199.50	24.03	21.68	2.00	41.5	23.1
2	HAMPTON 266A	1.00	190.00	26.28	26.15	2.00	41.1	23.5
3	HARDEE	1.00	160.50	36.15	21.90	2.00	42.1	22.4
1	JUPITER	1.00	198.50	43.45	24.03	2.75	42.8	22.7
11	CLARK 63	1.00	171.75	31.05	18.83	2.00	40.2	22.6
15	AMERICANA	1.00	157.00	47.95	22.08	2.00	39.3	22.8
6	BOSSIER	1.00	120.25	38.73	21.78	1.50	42.8	22.4
8	TRACY	1.00	200.00	22.40	22.20	1.75	43.6	20.3
12	WOODWORTH	1.00	172.25	30.13	19.65	1.75	39.2	23.2
9	FORREST	1.00	152.25	34.25	19.53	1.00	38.3	23.2
13	WILLIAMS	1.00	151.00	27.75	21.75	1.25	40.7	23.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05      ++ - PROB=-.01)								
YIELD	KG/HA	0.00	0.62++	0.04	0.28+	0.35++	0.00	0.00
DAYS TO FLOWER		0.00	-0.11	0.52++	-0.07	-0.20	0.00	0.00
DAYS TO MATURITY		0.00	0.00	0.46++	0.27+	0.33++	0.00	0.00
NODULE NUMBER 1		0.00	0.25	0.00	0.27+	0.20	0.00	0.00
NODULE NUMBER 2		0.00	0.31+	-0.00	0.21	0.12	0.00	0.00
NODULE WEIGHT 1		0.00	0.18	0.02	0.19	0.18	0.00	0.00
NODULE WEIGHT 2		0.00	0.34++	-0.17	0.31+	0.30+	0.00	0.00
PLANT HEIGHT		0.00	0.26+	0.74++	-0.10	0.21	0.00	0.00
LODGING		0.00	0.28+	0.59++	-0.15	0.09	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.19	0.13	0.23	0.00	0.00
PODS PER PLANT		0.00	-0.19	1.00	-0.32+	-0.15	0.00	0.00
100 SEED WEIGHT		0.00	0.13	-0.32+	1.00	0.60++	0.00	0.00
QUALITY OF SEED		0.00	0.23	-0.15	0.60++	1.00	0.00	0.00
DISEASE I		0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III		0.00	0.00	0.00	0.00	0.00	0.00	1.00



TABLE 185

EXPERIMENT 625

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - CABASSOU  
 LATITUDE - 4 DEG. 54 MIN. N  
 COOPERATORS - J. LACHER, P. MIRAS  
 DATE PLANTED - DECEMBER 12, 1975  
 SOIL TYPE - SAND 60%, SILT 4%, CLAY 33%, PH 5.5  
 FERTILIZER USED (KG/HA) - P 60.0, K 60.0  
 AMOUNT OF MOISTURE - 1915 MM  
 LOCAL VARIETY - VADA

COUNTRY - FRENCH GUIANA  
 ELEVATION - 10 M  
 LONGITUDE - 52 DEG. 18 MIN. W  
 DATE HARVESTED - MARCH, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	3444.86	31.50	111.00	106.75	452.75	0.26	2.69	63.00	1.00
4	IMPROVED PELICAN	2730.55	34.00	98.75	67.25	754.25	0.19	3.93	79.50	1.00
10	COLUMBUS	2642.19	34.00	95.00	189.25	1164.00	0.58	7.99	51.75	1.00
7	DAVIS	2640.94	31.00	98.75	91.50	475.75	0.18	2.63	30.25	1.00
14	CALLAND	2575.10	31.00	99.25	124.00	799.75	0.41	5.96	55.75	1.00
15	VADA	2534.67	40.00	101.25	308.00	697.75	1.43	5.04	96.25	1.00
2	HAMPTON 266A	2468.41	31.75	99.00	109.50	619.00	0.26	3.71	30.25	1.00
13	WILLIAMS	2332.13	31.75	97.00	96.25	998.00	0.28	3.70	50.50	1.00
3	HARDEE	2157.93	34.00	102.50	56.50	653.75	0.14	3.93	31.50	1.00
9	PORREST	2116.67	31.00	99.00	33.50	438.00	0.05	2.79	36.75	1.00
8	TRACY	1810.36	31.00	96.75	98.50	321.50	0.23	2.89	35.25	1.00
6	BOSSIER	1712.43	32.50	99.50	77.00	614.50	0.22	2.85	23.25	1.00
12	WOODWORTH	1065.21	31.75	94.00	73.25	532.50	0.25	3.36	44.00	1.00
11	CLARK 63	917.68	31.00	96.25	44.25	708.75	0.12	3.81	39.25	1.00
5	COBB	665.97	32.50	99.00	24.00	236.00	0.04	1.74	23.50	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****NS)										
C O R R E L A T I O N S										
(+ - PROB=-.05    +- - PROB=.01)										
YIELD	KG/HA	1.00	0.15	0.45++	0.43++	0.36++	0.29+	0.37++	0.52++	0.00
DAYS TO FLOWER	1.00	0.15	1.00	0.09	0.61++	0.15	0.74++	0.25+	0.60++	0.00
DAYS TO MATURITY	0.45++	0.09	1.00	0.06	1.00	-0.13	0.00	-0.21	0.19	0.00
NODULE NUMBER 1	0.43++	0.61++	0.06	1.00	0.40++	0.40++	0.91++	0.53++	0.58++	0.00
NODULE NUMBER 2	0.36++	0.15	-0.13	0.40++	1.00	0.32+	0.32+	0.70++	0.30+	0.00
NODULE WEIGHT 1	0.29+	0.74++	0.00	0.91++	0.32+	0.32+	1.00	0.48++	0.59++	0.00
NODULE WEIGHT 2	0.37++	0.25+	-0.21	0.53++	0.70++	0.70++	0.48++	1.00	0.37++	0.00
PLANT HEIGHT	0.52++	0.60++	0.19	0.58++	0.30+	0.30+	0.59++	0.37++	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.79++	0.28+	0.13	0.49++	0.23	0.23	0.42++	0.28+	0.49++	0.00
PODS PER PLANT	0.12	0.67++	0.43++	0.45++	-0.03	-0.03	0.52++	0.09	0.52++	0.00
100 SEED WEIGHT	0.21	-0.62++	0.02	-0.24	0.00	0.00	-0.43++	0.06	-0.48++	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 185 EXPERIMENT 625 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPIER	1.00	142.25	32.83	24.45	0.00	43.8	22.6
4	IMPROVED PELICAN	1.00	164.75	25.68	18.20	0.00	46.4	20.5
10	COLUMBUS	1.00	144.00	21.68	24.13	0.00	46.7	21.2
7	DAVIS	1.00	166.75	20.75	23.16	0.00	45.8	22.4
14	CALLAND	1.00	132.25	22.08	23.95	0.00	45.8	21.2
15	VADA	1.00	179.00	56.03	10.96	0.00	46.3	18.7
2	HAMPSON 266A	1.00	136.75	26.23	27.46	0.00	43.8	23.2
13	WILLIAMS	1.00	149.75	15.68	24.80	0.00	45.3	22.1
3	HARDEE	1.00	122.00	28.25	21.56	0.00	42.9	24.1
9	PORREST	1.00	149.25	24.20	18.30	0.00	40.6	25.4
8	TRACY	1.00	130.50	16.10	23.40	0.00	43.7	21.9
6	BOSSIER	1.00	115.25	23.00	20.91	0.00	45.2	22.7
12	WOODWORTH	1.00	92.00	20.00	18.81	0.00	40.7	23.5
11	CLARK 63	1.00	38.00	29.20	21.61	0.00	42.7	23.5
5	COBB	1.00	37.00	33.05	20.81	0.00	42.1	23.4
GRAND MEAN								
		1.00	126.63	26.31	21.50	0.00		
STANDARD ERROR OF A VARIETY MEAN								
		0.00	8.47	1.92	0.54	0.00		
COEFFICIENT OF VARIATION								
		0.00%	13.38%	14.62%	5.00%	0.00%		
5% LSD VARIETY MEANS (*****=NS)								
		0.00	24.21	5.50	1.54	0.00		
C O R R E L A T I O N S								
(+ - PROB=.05      ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.79++	0.12	0.21	0.00	0.00	0.00
DAYS TO	FLOWER	0.00	0.28+	0.67++	-0.62++	0.00	0.00	0.00
DAYS TO	MATURITY	0.00	0.13	0.43++	0.02	0.00	0.00	0.00
NODULE	NUMBER 1	0.00	0.49++	0.45++	-0.24	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.23	-0.03	0.18	0.00	0.00	0.00
NODULE	HEIGHT 1	0.00	0.42++	0.52++	-0.43++	0.00	0.00	0.00
NODULE	HEIGHT 2	0.00	0.28+	0.09	0.06	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.49++	0.52++	-0.48++	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.01	-0.09	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.01	1.00	-0.58++	0.00	0.00	0.00
100 SEED	WEIGHT	0.00	-0.09	-0.58++	1.00	0.00	0.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00	0.00	0.00
DISEASE	I	0.00	0.00	0.00	0.00	0.00	1.00	0.00
DISEASE	II	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DISEASE	III	0.00	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 186 EXPERIMENT 648 YEAR 1975

REGION - SOUTH AMERICA  
 SITE - INMORE  
 LATITUDE - 6 DEG. N  
 COOPERATORS - A.H. WAHAB, I. HASSAN  
 DATE PLANTED - JANUARY 21, 1976  
 SOIL TYPE - SAND 14%, SILT 22%, CLAY 12%, PH 3.7  
 FERTILIZER USED (KG/HA) - N 11.2, P 35.0, K 66.0  
 AMOUNT OF MOISTURE - 776 MM  
 SUBSTITUTION VARIETIES - JUPITER (PUERTO RICO), JUPITER (GUYANA)

COUNTRY - GUYANA  
 ELEVATION - -2 M  
 LONGITUDE - 58 DEG. W

DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NCNULE NUMBER 1	NCNULE NUMBER 2	NCNULE WEIGHT 1	NCNULE WEIGHT 2	PLANT HEIGHT	ICIGING
1	JUPITER	1685.40	31.00	105.00	153.00	265.25	0.45	1.78	56.40	1.00
14	JUPITER (GUYANA)	1562.31	31.00	105.00	130.25	279.75	0.47	1.48	48.53	1.00
13	JUPITER (PUERTO RICO)	1534.02	31.00	105.00	122.50	286.25	0.44	1.44	46.48	1.00
7	DAVIS	1397.09	28.00	93.00	165.50	361.00	0.46	2.15	26.25	1.00
3	HARDEE	1345.84	28.00	96.00	126.00	257.00	0.35	1.86	26.85	1.00
5	FERREST	1246.54	28.00	93.00	127.75	252.75	0.35	1.72	27.85	1.00
10	COLUMBUS	1239.43	28.00	93.00	124.00	240.00	0.29	1.41	27.53	1.00
6	BOSSTER	1084.27	28.00	93.00	161.00	256.50	0.52	1.69	21.83	1.00
8	TRACY	1114.20	28.00	93.00	137.25	221.25	0.40	1.37	25.25	1.00
12	WILLIAMS	991.01	28.00	93.00	144.75	239.75	0.49	1.41	23.53	1.00
4	IMPROVED PELICAN	950.89	28.00	93.00	131.25	298.25	0.41	1.72	23.78	1.00
2	HAMPTON 266A	876.67	28.00	99.00	167.75	263.00	0.47	1.70	24.70	1.00
5	COBB	793.58	28.00	99.00	175.75	337.75	0.60	2.24	15.78	1.00
11	WOODWORTH	590.96	28.00	93.00	166.00	242.00	0.44	1.30	25.60	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROE=.05 ** - ERCE=.01)										
YIELD	KG/HA	1.00	0.55++	0.47++	-0.24	0.19	-0.14	0.14	0.66++	0.00
DAYS TO FLOWER	1.00	0.55++	1.00	0.79++	-0.11	0.04	1.05	-0.12	0.93++	0.00
DAYS TO MATURITY	0.47++	0.79++	1.00	1.00	0.01	0.18	0.21	0.08	0.67++	0.00
NCNULE NUMBER 1	-0.24	-0.11	0.01	1.00	0.48++	0.48++	0.49++	-0.02	-0.16	0.00
NCNULE NUMBER 2	0.19	0.04	0.18	0.48++	1.00	1.00	0.23	0.41++	-0.01	0.00
NCNULE WEIGHT 1	-0.14	0.05	0.21	0.49++	0.23	0.23	1.00	0.18	-0.04	0.00
NCNULE WEIGHT 2	0.14	-0.12	0.08	-0.02	0.41++	0.41++	0.18	1.00	-0.12	0.00
PLANT HEIGHT	0.66++	0.93++	0.67++	-0.16	-0.01	-0.01	-0.04	-0.12	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.48++	0.02	-0.10	-0.24	0.03	0.03	-0.14	0.01	0.18	0.00
PLANTS PER PLANT	0.23	0.43++	0.05	0.05	0.13	0.13	0.00	0.22	0.28+	0.00
100 SEED WEIGHT	0.26	0.54++	-0.01	-0.01	0.14	0.14	0.08	-0.03	0.44++	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 186 EXPERIMENT 648 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	252.75	12.25	18.94	0.00
14	JUPITER (GUYANA)	1.00	253.50	13.75	18.56	0.00
13	JUPITER (PUERTO RICO)	1.00	249.50	14.50	17.59	0.00
7	DAVIS	1.00	339.75	9.00	16.20	0.00
3	HARDEE	1.00	244.25	12.50	15.17	0.00
5	FCRREST	1.00	313.25	9.75	13.48	0.00
10	COLUMBUS	1.00	253.25	10.25	16.71	0.00
6	BOSSIER	1.00	237.50	9.25	15.02	0.00
8	TRACY	1.00	262.25	9.00	17.21	0.00
12	WILLIAMS	1.00	238.25	7.25	16.83	0.00
4	IMPROVED PELICAN	1.00	329.25	7.75	13.93	0.00
2	HAMPTON 266A	1.00	273.50	11.00	14.18	0.00
5	COBB	1.00	113.50	14.75	18.68	0.00
11	WCCDWORTH	1.00	135.25	10.00	16.41	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	249.70	10.79	16.35	0.00
COEFFICIENT OF VARIATION		0.00	21.75	1.31	0.51	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	17.42%	24.35%	6.22%	0.00%
		0.00	62.23	3.76	1.45	0.00
C C R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD KG/HA		0.00	0.48++	0.23	0.26	0.00
DAYS TO FLOWER		0.00	0.32	0.43++	0.54++	0.00
DAYS TO MATURITY		0.00	-0.10	0.48++	0.49++	0.00
NODULE NUMBER 1		0.00	-0.24	0.05	-0.01	0.00
NODULE NUMBER 2		0.00	0.03	0.13	0.14	0.00
NODULE WEIGHT 1		0.00	-0.14	0.00	0.08	0.00
NODULE WEIGHT 2		0.00	0.01	0.22	-0.03	0.00
PLANT HEIGHT		0.00	0.18	0.28+	0.44++	0.00
ICDGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	-0.35++	-0.35++	0.00
PODS PER PLANT		0.00	-0.35++	1.00	0.31+	0.00
100 SEED WEIGHT		0.00	-0.35++	0.31+	1.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00



TABLE 187 EXPERIMENT 368 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - GUYANA  
 SITE - ENMORE ELEVATION - 2 M  
 LATITUDE - 6 DEG. N LONGITUDE - 58 DEG. W  
 COOPERATORS - A.H. WAHAB, I. HASSAN  
 DATE PLANTED - JANUARY 21, 1976 DATE HARVESTED - APRIL, 1976  
 SOIL TYPE - SAND 3%, SILT 24%, CLAY 63%, PH 4.2  
 FERTILIZER USED (KG/HA) - N 11.2, P 35.0, K 66.0  
 AMOUNT OF MOISTURE - 842 MM  
 SUBSTITUTE VARIETIES - JUPITER (PUERTO RICO), JUPITER (GUYANA)

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	IOINGING
14	JUPITER (GUYANA)	1822.34	47.00	110.00	133.25	209.50	0.21	0.64	28.25
13	JUPITER (PUERTO RICO)	1673.92	47.00	110.00	122.00	216.50	0.19	0.69	36.25
1	JUPITER	1285.24	40.75	110.00	144.50	172.75	0.30	0.64	29.75
2	HARDEE	1246.77	35.25	110.00	154.00	217.25	0.27	0.81	16.75
4	IMROVED PELICAN	1229.37	31.00	106.25	135.50	190.25	0.23	0.70	23.00
2	HAMPTON 266A	1017.87	31.00	110.00	131.00	188.25	0.22	0.81	18.50
8	TRACY	902.71	31.00	90.00	144.25	215.75	0.22	0.77	17.75
6	BOSSIFR	846.37	31.00	102.50	116.50	198.50	0.19	0.66	18.50
9	FORREST	721.15	31.00	98.75	125.75	264.00	0.23	0.95	19.75
12	WILLIAMS	683.75	31.00	110.00	96.50	182.00	0.14	0.57	17.00
10	COLUMBUS	650.73	31.00	106.25	147.75	154.25	0.39	0.83	16.25
7	DAVIS	582.43	34.00	104.50	123.50	193.00	0.21	0.65	17.75
5	COBB	387.50	31.00	110.00	129.25	304.75	0.17	0.99	15.75
11	WOODWORTH	335.78	31.00	101.75	116.75	175.50	0.18	0.71	17.00
GRAND MEAN									
STANDARD ERROR OF A VARIETY MEAN									
COEFFICIENT OF VARIATION									
5% ISI VARIETY MEANS (*****=NS)									
C O R R E L A T I O N S									
(* - PROE=.05 ** - FRCB=.01)									
YIELD	KG/HA	1.00							
DAYS TO FLOWER		0.67**	1.00	0.17	0.01	-0.11	0.11	-0.08	0.77**
DAYS TO MATURITY		0.17	0.32+	0.32+	-0.02	-0.03	-0.06	-0.19	0.80**
NODULE NUMBER 1		0.01	-0.02	1.00	0.68	0.08	0.00	0.06	0.00
NODULE NUMBER 2		-0.11	-0.02	0.08	1.00	0.07	0.66**	0.13	0.00
NODULE WEIGHT 1		0.11	-0.06	0.00	0.37	1.00	-0.07	0.71**	0.00
NODULE WEIGHT 2		-0.08	-0.19	0.00	0.66**	-0.07	1.00	0.20	0.00
PLANT HEIGHT		0.77**	0.80**	0.06	0.13	0.70**	0.20	1.00	0.00
LOADING		0.00	0.00	0.20	-0.02	-0.18	0.06	-0.15	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS HARVEST		0.31+	0.19	0.11	-0.20	-0.10	0.00	0.00	0.00
PODS PER PLANT		0.73**	0.48**	0.19	0.13	0.04	-0.08	0.33+	0.00
100 SEED WEIGHT		-0.05	-0.08	-0.00	0.02	0.27+	0.15	0.04	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	-0.00	-0.16	-0.16	0.00
									0.00



TABLE 187 EXPERIMENT 368 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	JUPITER (GUYANA)	1.00	198.75	14.75	19.13	0.00
13	JUPITER (PUERTO RICO)	1.00	219.75	15.00	20.14	0.00
1	JUPITER	1.00	216.25	14.00	19.87	0.00
3	HARDEE	1.00	151.25	11.25	21.15	0.00
4	IMPROVED PELICAN	1.00	222.75	12.50	17.39	0.00
2	HAMPTON 266A	1.00	214.75	9.75	21.44	0.00
8	TRACY	1.00	197.50	7.50	22.80	0.00
6	BOSSIER	1.00	192.75	9.25	19.82	0.00
5	FORREST	1.00	167.50	8.75	17.45	0.00
12	WILLIAMS	1.00	195.25	4.75	23.82	0.00
10	COLUMBUS	1.00	206.25	3.50	21.51	0.00
7	DAVIS	1.00	219.75	8.75	19.29	0.00
5	COBB	1.00	143.00	9.50	17.24	0.00
11	WOODWORTH	1.00	189.00	3.00	19.91	0.00
	GRAND MEAN	1.00	195.32	9.45	20.37	0.00
	STANDARD ERROR OF A VARIETY MEAN	0.00	16.87	1.68	0.47	0.00
	COEFFICIENT OF VARIATION	0.00%	17.28%	35.59%	4.69%	0.00%
	5% ISI VARIETY MEANS (*****=NS)	0.00	48.26	4.81	1.35	0.00
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
	YIELD KG/HA	0.00	0.31+	0.73++	-0.05	0.00
	DAYS TO FLOWER	0.00	0.19	0.48++	-0.08	0.00
	DAYS TO MATURITY	0.00	0.11	0.19	-0.00	0.00
	NCDULE NUMBER 1	0.00	-0.20	0.13	0.02	0.00
	NCDULE NUMBER 2	0.00	-0.10	0.04	-0.27+	0.00
	NCDULE WEIGHT 1	0.00	-0.08	0.15	-0.00	0.00
	NCDULE WEIGHT 2	0.00	-0.08	0.04	-0.16	0.00
	PLANT HEIGHT	0.00	0.33+	0.62++	-0.16	0.00
	LCDGING	0.00	0.00	0.00	0.00	0.00
	SHATTER	1.00	0.00	0.00	0.00	0.00
	PLANTS HARVEST	0.00	1.00	0.00	0.18	0.00
	PODS PER PLANT	0.00	0.07	1.00	-0.32+	0.00
	100 SEED WEIGHT	0.00	0.18	-0.32+	1.00	0.00
	QUALITY OF SEED	0.00	0.00	0.00	0.00	1.00

TABLE 188 EXPERIMENT 647 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - GUYANA  
 SITE - LA BONNE INTENTION ELEVATION - 2 M  
 LATITUDE - 6 DEG. N LONGITUDE - 58 DEG. W  
 COOPERATORS - A.H. WAHAB, I. HASSAN DATE HARVESTED - APRIL, 1976  
 DATE PLANTED - DECEMBER 18, 1975  
 SOIL TYPE - SAND 1%, SILT 24%, CLAY 74%, pH 5.1  
 FERTILIZER USED (KG/HA) - N 11.2, P 35.0, K 66.0  
 AMOUNT OF MOISTURE - 1372 MM  
 SUBSTITUTE VARIETIES - JUPITER (PUERTO RICCO), JUPITER (GUYANA)

INTY NUMER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
12	JUPITER (PUERTO RICCO)	2939.40	47.00	109.00	110.50	197.00	0.72	1.57	48.75	1.00
17	DAVIS	2914.54	34.00	96.00	86.75	151.75	0.32	1.80	23.25	1.00
3	HARDEN	2685.17	34.25	102.50	107.50	200.75	0.69	2.20	23.75	1.00
2	HAMPTON 266A	2648.83	31.00	98.25	153.75	230.75	0.57	2.01	23.50	1.00
1	JUPITER	2626.11	39.00	109.00	118.75	231.25	0.77	2.15	46.25	1.00
5	PERREST	2396.61	31.00	95.25	91.50	169.25	0.66	1.79	26.50	1.00
1	IMPROVED PELICAN	2310.57	32.75	98.00	117.75	174.25	0.67	1.50	22.50	1.00
10	COLUMBUS	2276.48	31.00	99.25	123.00	197.75	0.60	1.89	31.25	1.50
14	JUPITER (GUYANA)	2109.72	47.00	109.00	124.25	214.75	0.77	1.64	43.00	1.00
12	WILLIAMS	1895.96	31.00	92.75	167.25	273.25	0.77	1.97	29.50	1.25
6	BOSSIER	1852.29	31.00	93.75	151.25	231.25	0.93	2.08	23.75	1.00
8	TFACY	1596.87	31.00	89.75	124.25	183.25	0.81	1.61	23.00	1.00
5	CCBB	1061.66	31.00	99.25	99.25	159.25	0.51	1.66	19.25	1.00
11	WOODNORTH	969.26	32.00	88.00	112.00	159.50	0.56	1.03	25.50	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.33+	0.45++	0.08	0.17	0.09	0.27+	0.40++	-0.22
DAYS TO	FLOWER	0.33+	1.00	0.66++	-0.12	0.04	0.09	-0.07	0.80++	-0.19
DAYS TO	MATURITY	0.45++	0.66++	1.00	-0.08	0.16	0.11	0.17	0.65++	-0.27+
NODULE	NUMBER 1	0.08	-0.12	-0.08	1.00	0.44++	0.52++	0.25	0.03	0.11
NODULE	NUMBER 2	0.17	0.04	0.16	0.44++	1.00	0.26	0.67++	0.21	0.10
NODULE	WEIGHT 1	0.09	0.04	0.11	0.52++	1.26	0.15	0.15	0.15	-0.05
NODULE	WEIGHT 2	0.27+	-0.07	0.17	0.25	0.67++	0.15	1.00	0.03	-0.20
PLANT	HEIGHT	0.40++	0.80++	0.65++	0.33	0.21	0.15	0.03	1.00	-0.01
LOGGING		-0.22	-0.19	-0.27+	0.11	0.10	-0.05	-0.20	-0.01	1.00
SHATTER		-0.27+	-0.16	-0.19	0.05	0.01	0.05	0.10	-0.19	-0.10
PLANTS	HARVEST	0.65++	0.24	0.42++	0.18	0.17	0.09	0.20	0.33+	-0.37++
POIS PER	PLANT	0.44++	0.58++	0.74++	-0.14	0.11	0.05	0.22	0.60++	-0.30+
100 SEED	WEIGHT	0.14	-0.40++	-0.28+	0.47++	0.27+	0.13	0.04	-0.24	0.22
QUALITY	OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 188

EXPERIMENT 647

YEAR 1975

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
13	JUPITER (PUERTO RICO)	1.00	208.75	27.50	16.88	0.00
7	DAVIS	1.00	201.00	21.25	17.11	0.00
3	HAFDEE	1.00	191.50	23.00	17.27	0.00
2	HAMPTON 266A	1.00	210.50	20.75	20.87	0.00
1	JUPITER	1.00	203.25	33.50	16.35	0.00
9	FOREST	1.00	208.50	20.50	15.20	0.00
4	IMPROVED PELICAN	1.25	209.75	16.75	18.20	0.00
10	COLUMBUS	1.00	206.00	16.50	18.63	0.00
14	JUPITER (GUAYANA)	1.00	208.50	26.75	14.87	0.00
12	WILLIAMS	1.00	174.25	15.25	19.59	0.00
6	ROSSIER	1.25	196.00	17.00	18.12	0.00
8	TRACY	1.25	176.25	12.00	20.72	0.00
5	COBB	1.25	137.00	23.00	15.95	0.00
11	WOODWORTH	1.00	118.25	13.25	17.49	0.00
	GRAND MEAN	1.07	189.25	20.50	17.66	0.00
	STANDARD ERROR OF A VARIETY MEAN	0.13	14.31	1.44	0.72	0.00
	COEFFICIENT OF VARIATION	24.62%	15.12%	14.02%	8.20%	0.00%
	5% ISI VARIETY MEANS (*****=NS)	*****	40.93	4.11	2.07	0.00
C C R E L A T I O N S						
	YIELD KG/HA	-0.27+	0.65++	0.44++	0.14	0.00
	DAYS TO FLOWER	-0.16	0.24	0.58++	-0.40++	0.00
	DAYS TO MATURITY	-0.19	0.42++	0.74++	-0.28+	0.00
	NODULE NUMBER 1	0.05	0.18	-0.14	0.47++	0.00
	NODULE NUMBER 2	0.01	0.17	0.11	0.27+	0.00
	NODULE WEIGHT 1	0.05	0.09	0.05	0.13	0.00
	NODULE WEIGHT 2	0.10	0.20	0.22	0.04	0.00
	PLANT HEIGHT	-0.19	0.33+	0.60++	-0.24	0.00
	LODGING	-0.10	-0.37++	-0.30+	0.22	0.00
	SHATTER	1.00	-0.07	-0.23	0.06	0.00
	HARVEST	-0.07	1.00	0.16	-0.44++	0.00
	PODS PER PLANT	-0.23	0.16	1.00	1.00	0.00
	100 SEED WEIGHT	0.06	0.18	-0.44++	0.00	0.00
	QUALITY OF SEED	0.00	0.00	0.00	0.00	1.00

(+ - PROB=.05)

(+ - PROB=.01)

TABLE 189

EXPERIMENT 489

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - MCN REPOS  
 LATITUDE - 6 DEG. 45 MIN. N  
 COOPERATORS - H. ADAMS, D. PERSAND  
 DATE PLANTED - DECEMBER 11, 1975  
 SOIL TYPE - CLAY  
 FERTILIZER USED (KG/HA) - N 11.3, P 22.6, K 56.6  
 AMOUNT CF MOISTURE - 1671

CCOUNTRY - GUYANA  
 ELEVATION - 1 M  
 LONGITUDE - 56 DEG. W

DATE HARVESTED - APRIL, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS IC FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NCDULE NUMBER 2	NODULE WEIGHT 1	NCDULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	1342.35	37.00	114.00	367.50	0.00	1.45	0.00	31.70	0.00
4	IMPROVED PELICAN	767.90	35.00	113.00	240.00	0.00	1.33	0.00	32.15	0.00
7	DAVIS	562.15	33.00	118.75	247.50	0.00	1.48	0.00	22.18	0.00
2	HAMPTON 266A	503.93	32.75	117.00	283.00	0.00	1.48	0.00	22.88	0.00
9	FORREST	338.28	33.00	116.25	230.00	0.00	1.60	0.00	22.33	0.00
5	COBB	264.30	33.00	117.00	242.50	0.00	1.65	0.00	21.53	0.00
6	BCSSIER	263.43	32.50	116.50	212.50	0.00	1.35	0.00	20.88	0.00
8	TRACY	250.59	33.00	105.50	282.50	0.00	1.45	0.00	20.78	0.00
14	SEMMIS	210.71	33.25	118.00	252.50	0.00	1.23	0.00	19.20	0.00
10	COLUMBUS	150.03	34.75	105.50	247.50	0.00	1.25	0.00	20.03	0.00
3	HARDEE	133.44	34.50	110.50	267.50	0.00	1.10	0.00	19.48	0.00
13	CALLAND	90.85	31.50	108.00	172.50	0.00	1.20	0.00	19.88	0.00
12	WILLIAMS	83.02	33.00	105.50	377.50	0.00	1.03	0.00	19.13	0.00
11	WOODWORTH	21.63	32.50	105.25	280.00	0.00	0.97	0.00	19.00	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		355.90	33.48	112.20	264.29	0.00	1.32	0.00	22.22	0.00
COEFFICIENT OF VARIATION		79.31	0.47	1.74	35.21	0.00	0.13	0.00	1.23	0.00
5% ISI VARIETY MEANS (*****=NS)		44.57%	2.80%	3.10%	26.65%	0.00%	20.01%	0.00%	11.09%	0.00%
		226.89	1.34	4.98	100.73	0.00	0.38	0.00	3.52	0.00

## CORRELATIONS

(+ - PROE=.05    ++ - PROE=.01)

YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA	YIELD KG/HA
1.00	0.56++	0.29+	0.23	0.29+	0.00	0.24	0.00	0.00	0.80++	0.00
0.56++	1.00	0.08	0.33+	0.08	0.00	0.04	0.00	0.00	0.54++	0.00
0.29+	0.08	1.00	-0.14	1.00	0.00	0.47++	0.00	0.00	0.18	0.00
0.23	0.33+	-0.14	1.00	0.00	0.00	0.20	0.00	0.00	0.14	0.00
0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.24	0.04	0.47++	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.80++	0.54++	0.33	0.14	0.33	0.00	0.00	1.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.70++	0.26	0.43++	-0.06	0.00	0.00	0.32+	0.00	0.00	0.70++	0.00
0.68++	0.63++	0.29+	0.19	0.00	0.00	0.20	0.00	0.00	0.66++	0.00
-0.11	-0.23	-0.42++	0.12	0.00	0.00	-0.18	0.00	0.00	-0.20	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 189 EXPERIMENT 485 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PERCENT PROTEIN	PERCENT OIL
1	JUPITER	0.00	87.25	42.50	19.35	1.00	40.4	24.9
4	IMPROVED PELICAN	0.00	159.25	20.25	14.48	1.00	46.4	20.6
7	DAVIS	0.00	89.25	15.25	17.68	1.00	44.1	22.0
2	HAMPTON 266A	0.00	101.50	12.75	20.00	1.00	41.3	24.2
5	FORREST	0.00	55.75	12.25	15.60	1.00	42.4	22.9
5	CCBB	0.00	58.00	14.50	17.75	1.00	42.8	22.8
6	BOSSIER	0.00	70.00	12.50	17.55	1.00	44.2	21.3
8	TRACY	0.00	72.00	7.75	20.50	1.00	44.6	20.5
14	SEMME	0.00	66.00	10.50	16.20	1.00	42.8	23.0
10	CCUMBUS	0.00	24.75	10.00	20.20	1.00	46.7	21.0
3	HARDEE	0.00	14.00	16.75	16.45	1.00	44.9	22.0
13	CALLAND	0.00	23.00	7.75	21.83	1.00	42.6	22.0
12	WILLIAMS	0.00	22.25	7.75	21.68	1.00	45.6	21.8
11	WOODWORTH	0.00	6.00	7.00	18.55	1.00	43.8	21.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
ISI VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05      +- - PROB=.01)								
YIELD	KG/HA	0.00	0.70++	0.69++	-0.11	0.00		
DAYS TO FLOWER		0.00	0.26	0.63++	-0.23	0.00		
DAYS TO MATURITY		0.00	0.43++	0.29+	-0.42++	0.00		
NODULE NUMBER 1		0.00	-0.06	0.19	0.12	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.32+	0.20	-0.18	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		0.00	0.00	0.66++	-0.20	0.00		
LC D G I N G		0.00	0.00	0.00	0.00	0.00		
SEATTLE		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	0.37++	-0.34+	0.00		
PODS PER PLANT		0.00	0.37++	1.00	-0.18	0.00		
100 SEED WEIGHT		0.00	-0.34+	-0.00	1.00	0.00		
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00		



TABLE 190 EXPERIMENT 420 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - PERU  
 SITE - CHICLAYO ELEVATION - 517 M  
 LATITUDE - 5 DEG. 40 MIN. S LONGITUDE - 78 DEG. 36 MIN. W  
 COOPERATOR - C.A. MOYANO SESQUEN  
 DATE PLANTED - SEPTEMBER 13, 1975 DATE HARVESTED - DECEMBER, 1975  
 SOIL TYPE - CLAY, PH 8.3  
 AMOUNT OF MOISTURE - 162 MM  
 NUMBER OF IRRIGATIONS - 4  
 SUBSTITUTE VARIETY - IMPROVED PELICAN (2)  
 LOCAL VARIETY - NACIONAL

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	ICDGING
1	JUPITER	3904.95	27.00	111.25	155.75	142.00	1.38	1.65	61.75	1.00
14	IMPROVED PELICAN (2)	3877.44	33.75	98.25	128.00	136.50	1.25	1.73	74.50	2.00
5	COBB	3033.94	26.00	95.50	142.50	132.50	0.93	1.35	27.75	1.00
4	IMPROVED PELICAN	2954.76	30.75	95.50	143.00	97.00	0.92	1.13	56.25	1.25
3	HARDEE	2949.76	30.50	100.50	138.00	139.00	0.80	1.05	34.00	1.00
15	NACIONAL	2583.85	43.75	105.00	89.75	117.25	0.83	1.48	84.00	2.00
7	DAVIS	2348.80	28.00	99.00	149.50	134.50	0.80	1.53	32.00	1.00
10	COLUMBUS	2345.89	25.00	96.00	163.00	160.00	1.25	2.13	40.75	1.25
2	HAMPTON 266A	2287.96	25.75	94.75	146.50	88.25	0.80	1.00	20.25	1.00
9	FORREST	2172.93	27.00	96.50	103.00	101.25	0.85	0.90	35.00	1.25
8	TRACY	1954.56	24.75	89.00	185.00	133.25	1.23	1.83	32.25	1.00
11	CLARK 63	1912.88	24.00	91.00	115.00	77.25	0.80	1.28	33.50	1.00
6	BOSSIER	1801.61	25.00	93.25	154.25	124.75	0.85	1.43	17.00	1.00
13	WILLIAMS	1739.93	25.50	89.00	174.75	132.75	1.58	1.63	36.75	1.75
12	WOODWORTH	1548.23	23.00	89.75	123.75	80.50	0.80	1.28	39.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2494.50	27.98	96.55	140.78	119.78	1.00	1.42	41.65	1.23
COEFFICIENT OF VARIATION		277.35	0.54	0.77	15.58	15.47	0.13	0.20	4.07	0.12
5% ISI VARIETY MEANS (*****=NS)		22.24%	3.87%	1.59%	22.13%	25.83%	26.32%	28.30%	19.56%	19.38%
		791.57	1.55	2.18	44.46	44.15	0.38	0.57	11.63	0.34
C O R R E L A T I O N S										
(+ - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.29+	0.59++	0.01	0.13	0.19	0.10	0.53++	0.23
DAYS TO FLOWER	1.00	0.29+	1.00	0.52++	-0.39++	0.06	-0.11	-0.02	0.71++	0.62++
DAYS TO MATURITY	0.59++	0.52++	1.00	1.00	-0.16	0.27+	0.02	0.05	0.54++	0.14
NODULE NUMBER 1	0.01	-0.39++	-0.16	1.00	1.00	0.44++	0.46++	0.39++	-0.21	-0.27+
NODULE NUMBER 2	0.13	0.06	0.27+	0.44++	0.44++	1.00	0.42++	0.75++	0.08	0.05
NODULE WEIGHT 1	0.19	-0.11	0.02	0.46++	0.46++	0.42++	1.00	0.54++	0.13	0.03
NODULE WEIGHT 2	0.10	-0.02	0.05	0.39++	0.75++	0.75++	0.54++	1.00	0.15	0.11
PLANT HEIGHT	0.53++	0.71++	0.54++	-0.21	-0.21	0.08	0.13	0.15	1.00	0.63++
ICDGING	0.23	0.62++	0.14	-0.27+	-0.27+	0.05	0.03	0.11	0.63++	1.00
SHATTER	0.17	0.51++	0.09	-0.15	-0.15	0.11	0.01	0.27+	0.41++	0.44++
HARVEST	-0.00	0.16	-0.08	0.08	0.08	0.09	0.11	0.06	0.30+	0.10
PODS PER PLANT	0.69++	0.43++	0.84++	-0.14	-0.14	0.11	0.08	-0.03	0.62++	0.22
100 SEED WEIGHT	0.07	0.06	0.09	0.17	0.17	0.05	0.13	0.13	0.01	0.08
QUALITY OF SEED	-0.36++	-0.51++	-0.28+	0.15	0.15	-0.13	0.05	0.12	-0.26+	-0.36++

TABLE 190 EXPERIMENT 420 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	157.50	49.97	20.05	3.50
14	IMPROVED PELICAN (2)	2.00	167.50	30.57	17.13	1.00
5	COBB	1.00	139.25	24.47	20.70	1.50
4	IMPROVED PELICAN	1.30	201.25	23.33	15.73	1.00
3	HARDEE	1.00	157.50	31.70	20.55	2.00
15	NACIONAL	2.00	159.25	34.80	23.43	2.00
7	DAVIS	1.00	167.25	17.15	18.45	3.00
10	COLUMBUS	1.00	161.00	20.00	21.18	3.00
2	HAMPTON 266A	1.00	137.75	20.55	23.35	2.25
9	FORREST	1.00	172.00	22.13	16.95	2.50
8	TRACY	1.50	166.50	14.93	21.75	4.00
11	CLARK 63	1.25	154.00	16.08	20.28	3.75
6	BOSSIER	1.75	138.50	18.65	19.38	2.25
13	WILLIAMS	1.00	164.75	15.10	22.23	3.00
12	WOODWORTH	1.00	164.50	15.63	19.03	4.00
	GRAND MEAN	1.23	160.57	23.67	20.01	2.58
	STANDARD ERROR OF A VARIETY MEAN	0.12	8.11	2.15	0.68	0.17
	COEFFICIENT OF VARIATION	18.97%	10.11%	18.16%	6.81%	13.27%
5%	151 VARIETY MEANS (*****=NS)	0.33	23.16	6.13	1.95	0.49
C C R E L A T I O N S (+ - PROB=.05 + + - PROB=.01)						
	YIELD KG/HA	0.17	-0.00	0.69++	0.07	-0.36++
	DAYS TO FLOWER	0.51++	3.16	3.43++	0.06	-0.51++
	DAYS TO MATURITY	0.09	-0.08	0.84++	0.09	-0.28+
	NODULE NUMBER 1	-0.15	0.08	-0.14	0.17	0.15
	NODULE NUMBER 2	0.11	0.09	0.11	0.05	-0.13
	NODULE WEIGHT 1	0.01	0.11	0.08	0.13	0.05
	NODULE WEIGHT 2	0.27+	0.06	-0.03	0.13	0.12
	PLANT HEIGHT	0.41++	0.30+	0.62++	0.01	-0.26+
	LOGGING	0.44++	0.10	0.22	0.08	-0.36++
	SHATTER	1.00	-0.11	0.18	0.07	-0.20
	PLANTS HARVEST	-0.11	1.00	-0.07	-0.36++	-0.08
	PODS PER PLANT	0.18	-0.07	1.00	0.11	-0.21
	100 SEED WEIGHT	0.07	-0.36++	0.11	1.00	0.25
	QUALITY OF SEED	-0.20	-0.08	-0.21	3.25	1.00

TABLE 191 EXPERIMENT 498 YEAR 1975

REGION - SOUTH AMERICA COUNTRY - PERU  
 SITE - EL PORVENIR ELEVATION - 232 M  
 LATITUDE - 6 DEG. 31 MIN. S LONGITUDE - 76 DEG. 21 MIN W  
 COOPERATORS - H. TUESTA DIAZ, V. MENDOZA PAREDES  
 DATE PLANTED - JANUARY 9, 1976 DATE HARVESTED - APRIL, 1976  
 SOIL TYPE - SAND 50%, SILT 22%, CLAY 28%, PH 6.6  
 AMOUNT OF MOISTURE - 289 MM  
 NUMBER OF IRRIGATIONS - 2

ENTRY NUMBER	VARIETY OF CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NCDULE NUMBER 2	NODULE WEIGHT 1	NCDULE WEIGHT 2	PIANT HEIGHT	ICGING
4	IMPROVED PELICAN	3285.24	28.75	89.00	10.50	12.00	0.00	0.00	46.50	0.00
5	FORREST	2861.82	30.75	92.00	11.00	12.00	0.00	0.00	36.00	0.00
1	JUPITER	2566.35	39.50	101.00	12.75	14.00	0.00	0.00	62.75	0.00
14	CALLAND	2511.34	28.75	89.00	11.25	13.75	0.00	0.00	40.75	0.00
15	SEMME	2358.39	38.25	101.00	13.75	11.25	0.00	0.00	22.25	0.00
7	DAVIS	2323.38	39.25	101.00	12.25	12.75	0.00	0.00	29.00	0.00
3	HARDEE	2296.29	36.75	98.00	13.75	13.50	0.00	0.00	27.75	0.00
10	CCUMBEUS	2292.12	29.50	89.00	13.25	14.00	0.00	0.00	37.25	0.00
13	WILLIAMS	2283.37	29.00	89.00	10.75	11.75	0.00	0.00	38.75	0.00
8	TRACY	2132.93	29.25	85.00	11.25	13.75	0.00	0.00	25.25	0.00
2	HAMPTON 266A	2086.25	39.00	101.00	9.50	10.75	0.00	0.00	28.00	0.00
6	BOSSIER	2007.48	39.00	101.00	11.75	12.50	0.00	0.00	22.25	0.00
5	CCBB	1843.29	39.00	101.00	12.00	9.75	0.00	0.00	28.25	0.00
12	WOODWORTH	1808.28	28.75	89.00	11.50	12.50	0.00	0.00	39.25	0.00
11	CIARK 63	1756.19	28.75	89.00	12.50	10.25	0.00	0.00	33.25	0.00
GRAND MEAN										
2296.85										
STANDARD ERROR OF A VARIETY MEAN										
191.65										
COEFFICIENT OF VARIATION										
16.69%										
5% ISI VARIETY MEANS (*****=NS)										
546.97										
C O R R E L A T I O N S										
(* - PROE=.05 ** - PEEB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.12								
DAYS TO MATURITY		1.00								
NCDULE NUMBER 1		-0.05								
NCDULE NUMBER 2		0.07								
NCDULE WEIGHT 1		-0.35								
NCDULE WEIGHT 2		0.00								
NCDULE WEIGHT 1		0.00								
NCDULE WEIGHT 2		0.00								
PLANT		0.41**								
LOGGING		0.00								
SHATTER		0.00								
HARVEST		0.32*								
PLANTS		0.04								
POTS PER PLANT		0.17								
100 SEED WEIGHT		0.18								
QUALITY CF SEED		0.23								

TABLE 191 EXPERIMENT 498 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
4	IMPROVED PELICAN	0.00	160.00	21.75	26.03	3.00
5	FORREST	0.00	161.25	20.75	18.75	2.00
1	JUETTER	0.00	144.50	20.50	22.70	3.00
14	CALLAND	0.00	153.50	20.25	19.88	2.00
15	SEWES	0.00	156.75	19.50	15.48	2.00
7	DAVIS	0.00	136.25	22.25	19.93	2.25
3	HARDEE	0.00	149.50	41.75	18.40	2.25
10	COLUMBUS	0.00	171.00	25.75	22.25	1.00
13	WILLIAMS	0.00	151.25	19.00	20.28	3.00
8	TRACY	0.00	139.00	19.75	20.43	2.00
2	HAMPTON 266A	0.00	145.00	20.75	26.45	3.00
6	BOSSIER	0.00	145.50	27.50	15.45	2.00
9	CCBB	0.00	130.25	21.75	21.88	2.00
12	WODSWORTH	0.00	136.00	18.50	18.05	2.25
11	CLARK 63	0.00	146.75	21.00	22.73	2.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	148.43	22.72	21.11	2.25
COEFFICIENT OF VARIATION		0.00%	7.09	2.10	0.27	0.11
5% ISI VARIETY MEANS (*****NS)		0.00	20.24	18.47*	2.61%	9.86%
				5.99	0.78	0.32
C C R E I A T I C N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.32+	0.04	0.18	0.23
DAYS TO FLOWER		0.00	-0.25	0.17	0.06	0.11
DAYS TO MATURITY		0.00	-0.24	0.16	0.04	0.12
NODULE NUMBER 1		0.00	0.06	0.21	-0.12	-0.17
NODULE NUMBER 2		0.00	0.09	0.15	-0.09	-0.10
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	WEIGHT	0.00	0.16	-0.21	0.27+	0.36++
LOADING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.10	0.08	-0.15
PODS PER	PLANT	0.00	-0.10	1.00	-0.17	-0.14
100 SEED	WEIGHT	0.00	0.08	-0.17	1.00	0.37++
QUALITY	OF SEED	0.00	-0.15	-0.14	0.37++	1.00

TABLE 192

EXPERIMENT 499

YEAR 1975

REGION - SOUTH AMERICA  
SITE - EL PORVENIR  
LATITUDE - 6 DEG. 31 MIN. S  
COOPERATORS - H. TUESIA DIAZ, D. FORTIGUEZ  
DATE PLANTED - MARCH 11, 1976  
SCIL TYPE - SAND 47%, SILT 26%, CLAY 27%, CH 6.8  
AMOUNT OF MOISTURE - 409 MM  
LOCAL VARIETIES - VADA, NACIONAL

COUNTRY - PERU  
ELEVATION - 232 M  
LONGITUDE - 76 DEG. 21 MIN W  
DATE HARVESTED - JUNE, 1976

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODUL NUMBER 1	MODUL NUMBER 2	MODUL WEIGHT 1	MODUL WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	2037.91	51.00	116.00	0.00	0.00	0.00	0.00	41.00	2.00
3	HARDEE	1508.71	51.00	116.00	0.00	0.00	0.00	0.00	21.25	2.00
9	FOREST	1898.30	48.00	100.00	0.00	0.00	0.00	0.00	21.50	2.00
12	NACIONAL	1867.04	51.00	116.00	0.00	0.00	0.00	0.00	55.25	2.00
10	COLUMBUS	1806.61	48.00	100.00	0.00	0.00	0.00	0.00	30.50	2.00
1	JUPITER	1752.43	48.00	100.00	0.00	0.00	0.00	0.00	54.00	2.00
13	WILLIAMS	1621.16	48.00	100.00	0.00	0.00	0.00	0.00	32.25	2.00
11	CLARK 63	1577.40	48.00	100.00	0.00	0.00	0.00	0.00	28.50	2.00
2	HAMPTON 266A	1554.48	51.00	116.00	0.00	0.00	0.00	0.00	25.00	2.00
8	TRACY	1500.30	48.00	100.00	0.00	0.00	0.00	0.00	26.00	2.00
12	WOODWORTH	1487.80	55.00	120.00	0.00	0.00	0.00	0.00	31.50	2.00
14	VADA	1477.38	51.00	116.00	0.00	0.00	0.00	0.00	51.75	2.00
7	DAVIS	1423.20	55.00	120.00	0.00	0.00	0.00	0.00	22.00	2.00
5	COBB	1350.27	48.00	100.00	0.00	0.00	0.00	0.00	23.25	2.00
6	BOSSIER	1341.93	55.00	120.00	0.00	0.00	0.00	0.00	21.25	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% ISI VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05    +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.25	-0.08	0.00	0.00	0.00	0.00	0.25	0.00
DAYS TO FLOWER		-0.25	1.00	0.92++	0.00	0.00	0.00	0.00	-0.12	0.00
DAYS TO MATURITY		-0.08	0.92++	1.00	0.00	0.00	0.00	0.00	0.05	0.00
MODUL NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
MODUL NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
MODUL WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
MODUL WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.25	-0.12	0.05	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.23	-0.01	0.09	0.00	0.00	0.00	0.00	0.30+	0.00
PODS PER PLANT		-0.05	-0.07	0.08	0.00	0.00	0.00	0.00	-0.05	0.00
100 SEED WEIGHT		-0.10	-0.25	-0.13	0.00	0.00	0.00	0.00	0.13	0.00
QUALITY CF SEED		-0.22	0.30+	0.33+	0.00	0.00	0.00	0.00	-0.32+	0.00



TABLE 192 EXPERIMENT 499 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SEEDLING PLANT	PLANT HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
4	IMPROVED PELICAN	2.00	138.50	27.00	20.38	2.00
5	HARDEE	2.00	133.00	23.00	15.13	2.00
9	FOREST	2.00	119.25	25.00	19.03	2.00
15	NACIONAL	2.00	140.00	23.25	19.00	1.75
10	CCUMBUS	2.00	136.25	25.50	22.33	1.00
11	JUPITER	2.00	136.75	29.50	23.18	1.25
12	WILLIAMS	2.00	127.00	24.50	20.00	2.00
11	CLARK 63	2.00	134.25	24.00	21.93	2.00
2	HAMPTON 266A	2.00	129.75	50.00	26.20	2.00
6	TRACY	2.00	126.00	26.00	19.98	2.00
12	WCDWORTH	2.00	118.00	22.00	18.15	2.00
14	VADA	2.00	126.00	25.50	22.05	2.00
7	DAVIS	2.00	130.75	23.00	19.00	2.00
5	COBB	2.00	109.50	24.50	20.48	2.00
6	BOSSIER	2.00	127.25	25.00	21.13	2.00
GRAND MEAN						
		2.00	128.82	26.52	20.78	1.87
STANDARD ERROR OF A VARIETY MEAN		0.00	5.96	0.41	0.11	0.09
COEFFICIENT OF VARIATION		0.00%	9.26%	3.11%	1.08%	10.12%
5% ISI VARIETY MEANS (*****=NS)		0.00	17.01	1.18	0.32	0.27
C C R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.23	-0.05	-0.10	-0.22
DAYS TO	FLCWR	0.00	-0.01	-0.07	-0.25	-0.30+
DAYS TO	MATURITY	0.00	0.09	0.08	-0.13	0.33+
NODULE	NUMBER 1	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
100 GING	100 GING	0.00	0.30+	-0.05	0.13	-0.32+
SHATTER	SHATTER	0.00	0.00	0.00	0.00	0.00
HARVEST	HARVEST	0.00	0.00	0.00	0.00	0.00
PLANT	PLANT	0.00	0.07	1.00	0.16	-0.21
100 SEED	WEIGHT	0.00	0.16	0.82++	1.00	-0.01
QUALITY	OF SEED	0.00	-0.21	-0.01	-0.25	1.00

TABLE 193

EXPERIMENT 422

YEAR 1975

## REGION - SOUTH AMERICA

COUNTRY - PERU

SITE - PIURA

ELEVATION - 80 M

LATITUDE - 4 DEG. 51 MIN. S

LONGITUDE - 80 DEG. 43 MIN. W

COOPERATOR - G.A. DEL RIO ESCURRA

DATE PLANTED - AUGUST 22, 1975

DATE HARVESTED - DECEMBER, 1975

SOIL TYPE - CLAY, PH 7.6

AMOUNT OF MOISTURE - 500 MM

NUMBER OF IRRIGATIONS - 5

SUBSTITUTE VARIETIES - HILL, IMPROVED PELICAN (2)

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
14	HILL	3923.70	39.75	96.00	352.75	345.00	2.31	4.92	48.25	0.00
4	IMPROVED PELICAN	3711.16	37.50	94.75	395.25	652.25	2.92	6.31	71.00	0.00
7	DAVIS	3427.35	39.75	96.00	394.75	548.75	2.70	7.53	36.50	0.00
1	JUPITER	3419.85	40.50	136.00	399.25	602.75	2.53	5.47	73.00	0.00
9	FCRREST	3228.15	35.25	93.75	335.50	411.00	2.55	5.54	30.25	0.00
15	IMPROVED PELICAN (2)	3175.63	39.75	93.75	368.50	575.00	2.51	6.67	70.25	0.00
3	HARDEE	2855.57	35.00	87.25	223.75	457.25	2.15	6.13	32.75	0.00
2	HAMPTON 266A	2494.23	32.00	84.25	253.25	360.50	2.60	4.26	20.75	0.00
10	COLUMBUS	2339.63	31.50	87.00	244.00	305.75	2.42	4.50	33.25	0.00
13	WILLIAMS	2073.33	31.50	79.75	184.00	247.25	2.71	4.57	33.50	0.00
5	CCEB	1916.63	34.00	86.75	238.50	418.00	2.56	5.95	25.00	0.00
12	WOODWORTH	1809.53	31.00	77.75	155.25	120.50	2.78	2.55	29.75	0.00
8	TRACY	1732.01	35.00	75.00	172.50	176.50	2.43	2.89	22.75	0.00
6	BOSSIER	1717.01	31.00	82.25	273.25	389.75	3.10	5.41	16.75	0.00
11	CLARK 63	1608.65	31.00	85.75	117.75	174.00	1.70	2.99	28.00	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2622.83	34.97	90.38	273.88	385.62	2.53	5.05	38.12	0.00
COEFFICIENT OF VARIATION		309.89	1.12	1.72	36.21	73.55	0.33	0.81	3.27	0.00
5% ISI VARIETY MEANS (*****=NS)		23.63%	6.42%	3.80%	26.44%	38.14%	26.36%	32.14%	17.18%	0.00%
		884.44	3.21	4.90	103.36	209.90	*****	2.31	9.35	0.00
CORRELATIONS (+ - PROE=.05 ** - ERCE=.01)										
YIELD	KG/HA	1.00	0.70**	0.55**	0.63**	0.64**	0.17	0.62**	0.64**	0.00
DAYS TO FLOWER	1.00	0.70**	0.64**	0.64**	0.68**	0.65**	0.03	0.52**	0.64**	0.00
DAYS TO MATURITY	0.55**	0.64**	0.64**	1.00	0.58**	0.57**	0.02	0.37**	0.68**	0.00
NODULE NUMBER 1	0.63**	0.68**	0.58**	1.00	0.66**	0.66**	0.49**	0.55**	0.54**	0.00
NODULE NUMBER 2	0.64**	0.65**	0.57**	0.66**	0.66**	1.00	0.28	0.84**	0.56**	0.00
NODULE WEIGHT 1	0.17	0.03	0.02	0.49**	0.55**	0.28	1.00	0.34**	0.05	0.00
NODULE WEIGHT 2	0.62**	0.52**	0.37**	0.55**	0.54**	0.84**	0.34**	1.00	0.33**	0.00
PLANT	HEIGHT	0.64**	0.64**	0.68**	0.54**	0.56**	0.05	0.33**	1.00	0.00
LOGGING	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.33**	0.33**	0.28**	0.35**	0.35**	0.25	0.15	0.24	0.15	0.00
PODS PER PLANT	0.70**	0.60**	0.60**	0.84**	0.56**	0.55**	0.04	0.47**	0.64**	0.00
100 SEED WEIGHT	0.18	0.33	0.17	0.14	0.14	0.21	0.17	0.28	-0.13	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 193 EXPERIMENT 422 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	HILL	0.30	188.50	34.75	17.60	0.00
4	IMPROVED PELICAN	0.00	176.75	34.25	16.13	0.00
7	DAVIS	0.00	174.50	31.75	19.98	0.00
1	JUPITER	0.00	157.00	47.75	19.83	0.00
5	FORREST	0.00	171.00	34.00	17.13	0.00
15	IMPROVED PELICAN (2)	0.00	172.00	29.25	16.60	0.00
3	HARDEE	0.00	175.75	24.75	18.30	0.00
2	HAMPTON 266A	0.00	166.50	21.75	23.83	0.00
10	COLUMBUS	0.00	166.25	26.50	19.28	0.00
13	WILLIAMS	0.00	165.00	22.00	19.28	0.00
5	COBB	0.00	172.75	26.75	20.15	0.00
12	WOODWORTH	0.00	154.25	19.75	15.13	0.00
8	TRACY	0.00	172.00	15.50	17.23	0.00
6	BOSSIER	0.00	168.75	19.25	17.78	0.00
11	CLARK 63	0.00	134.75	20.50	16.95	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	167.72	27.23	18.34	0.00
COEFFICIENT OF VARIATION		0.00	7.33	1.89	0.65	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	8.74%	13.89%	7.08%	0.00%
		0.00	20.93	5.40	1.85	0.00
C O R R E L A T I O N S (+ - PROB=.05 ** - PROB=.01)						
YIELD	KG/HA	0.00	0.33++	0.70++	0.18	0.00
DAYS TO FLOWER		0.00	0.28+	0.60++	0.03	0.00
DAYS TO MATURITY		0.00	-0.03	0.84++	0.17	0.00
NODULE NUMBER 1		0.00	0.35++	0.56++	0.14	0.00
NODULE NUMBER 2		0.00	0.25	0.55++	0.21	0.00
NODULE WEIGHT 1		0.00	0.15	0.04	0.17	0.00
NODULE WEIGHT 2		0.00	0.24	0.47++	0.28+	0.00
PLANT HEIGHT		0.00	0.15	0.64++	-0.13	0.00
LCDCING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.07	0.06	0.00
PODS PER PLANT		0.00	0.07	1.00	0.12	0.00
100 SEED WEIGHT		0.00	0.06	0.12	1.00	0.00
QUALITY CP SEED		0.00	0.00	0.00	0.00	1.00

TABLE 194

EXPERIMENT 419

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - TINGO MARIA  
 COUNTRY - PERU  
 ELEVATION - 610 M  
 LATITUDE - 9 DEG. 18 MIN. S  
 LONGITUDE - 67 DEG. 1 MIN. W  
 COOPERATOR - M. LOPEZ  
 DATE PLANTED - JULY 15, 1975  
 EATI HARVESTED - NOVEMBER, 1975  
 SOIL TYPE - CLAY, EU 5.8  
 FERTILIZER USED (KG/HA) - F 60.0  
 AMOUNT OF MOISTURE - 549 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LCISG
1	JUPITER	3648.65	32.00	123.00	0.00	0.00	0.00	0.00	85.00	1.00
4	IMPROVED PELICAN	3517.37	32.00	106.00	0.00	0.00	0.00	0.00	80.00	2.00
7	DAVIS	2871.41	31.00	92.00	0.00	0.00	0.00	0.00	36.00	1.00
6	BCSSIER	2598.44	23.00	92.00	0.00	0.00	0.00	0.00	30.00	1.00
9	FOREST	2527.59	28.00	92.00	0.00	0.00	0.00	0.00	40.00	1.00
13	WILLIAMS	2448.41	22.00	92.00	0.00	0.00	0.00	0.00	42.50	1.00
3	HARDEE	2227.53	31.00	92.00	0.00	0.00	0.00	0.00	26.00	1.00
14	CAILLAND	2198.36	21.00	92.00	0.00	0.00	0.00	0.00	45.50	1.00
12	WCCDORTH	2115.01	28.00	92.00	0.00	0.00	0.00	0.00	30.00	1.00
10	COLUMBUS	2098.34	22.00	92.00	0.00	0.00	0.00	0.00	48.00	1.00
8	TRACY	1973.31	23.00	82.00	0.00	0.00	0.00	0.00	32.00	1.00
2	HAMPTON 266A	1910.80	23.00	92.00	0.00	0.00	0.00	0.00	25.00	1.00
11	CIARK 63	1752.43	22.00	94.00	0.00	0.00	0.00	0.00	40.00	1.00
15	SELMES	1525.30	24.00	92.00	0.00	0.00	0.00	0.00	25.00	1.00
5	COBB	1469.04	28.00	52.00	0.00	0.00	0.00	0.00	35.00	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2325.46	26.00	94.47	0.00	0.00	0.00	0.00	41.33	1.07
COEFFICIENT OF VARIATION		169.84	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00
5% ISI VARIETY MEANS (*****=NS)		14.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.94%	0.00%
		484.74	0.00	0.00	0.00	0.00	0.00	0.00	1.74	0.00
C O R R E L A T I O N S										
(* - PROE=.05      ** - PRCE=.01)										
YIELD	KG/HA	1.00	0.54**	0.67**	0.00	0.00	0.00	0.00	0.71**	0.47**
DAYS TO FLOWER		0.54**	1.00	0.55**	0.00	0.00	0.00	0.00	0.43**	0.40**
DAYS TO MATURITY		0.67**	0.55**	1.00	0.00	0.00	0.00	0.00	0.85**	0.35**
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.71**	0.43**	0.85**	0.00	0.00	0.00	0.00	1.00	0.59**
LOGGING		0.47**	0.40**	0.35**	0.00	0.00	0.00	0.00	0.59**	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.18	0.25	-0.11	0.00	0.00	0.00	0.00	0.03	0.21
PODS PER PLANT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		-0.23	-0.24	0.03	0.00	0.00	0.00	0.00	-0.13	-0.53**
QUALITY CF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 194 EXPERIMENT 419 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	144.25	0.00	26.28	0.00
4	IMPROVED PELICAN	1.00	173.50	0.00	17.63	0.00
7	DAVIS	1.00	163.25	0.00	24.13	0.00
6	BOSSIER	1.00	141.75	0.00	24.15	0.00
9	FORREST	1.00	166.50	0.00	23.05	0.00
13	WILLIAMS	1.00	148.50	0.00	19.20	0.00
3	HARDEE	1.00	137.50	0.00	18.23	0.00
14	CALLAN	1.00	156.50	0.00	25.03	0.00
12	WOODWORTH	1.00	181.00	0.00	24.03	0.00
10	COUMBUS	1.00	152.50	0.00	26.18	0.00
8	TRACY	1.00	174.25	0.00	23.13	0.00
2	HAMPTON 266A	1.00	136.50	0.00	24.25	0.00
11	CLARK 63	1.00	106.75	0.00	21.03	0.00
15	SEMMES	1.00	164.75	0.00	27.08	0.00
5	CCBB	1.00	173.75	0.00	25.10	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	154.75	0.00	23.23	0.00
COEFFICIENT OF VARIATION		0.00	8.44	0.00	0.13	0.00
5% ISI VARIETY MEANS (*****=NS)		0.00	19.91%	0.00%	1.08%	0.00%
		0.00	24.09	0.00	0.36	0.00
C C R R E I A T I C N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.18	0.00	-0.23	0.00
DAYS TO FLOWER		0.00	0.25	0.00	-0.24	0.00
DAYS TO MATURITY		0.00	-0.11	0.00	0.03	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
HEIGHT		0.00	0.03	0.00	-0.13	0.00
LOGGING		0.00	0.21	0.00	-0.53++	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS		0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	1.00	0.00	0.14	0.00
100 SEED WEIGHT		0.00	0.00	1.00	0.00	0.00
QUALITY OF SEED		0.00	0.14	0.00	1.00	0.00
		0.00	0.00	0.00	0.00	1.00



TABLE 195

EXPERIMENT 387

YEAR 1975

REGION - SOUTH AMERICA  
 SITE - MARACAY  
 LATITUDE - 10 DEG. 14 MIN. N  
 COOPERATOR - SIMON CRTEGA

COUNTRY - VENEZUELA  
 ELEVATION - 450 M

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TC FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	TOILING
1	JUPITER	3467.36	40.50	90.50	0.00	0.00	0.00	0.00	107.00	1.00
15	SEMME	3170.22	32.00	95.50	0.00	0.00	0.00	0.00	68.00	1.00
14	CAILAND	2976.01	28.50	88.75	0.00	0.00	0.00	0.00	76.75	1.00
7	DAVIS	2896.41	28.50	85.50	0.00	0.00	0.00	0.00	63.00	1.00
6	BOSSIER	2780.14	39.50	108.75	0.00	0.00	0.00	0.00	80.00	2.00
4	IMPROVED PELICAN	2702.21	40.50	95.25	0.00	0.00	0.00	0.00	95.50	2.00
2	HAMPTON 266A	2688.87	31.75	95.75	0.00	0.00	0.00	0.00	58.25	1.00
10	COLUMBUS	2431.74	31.50	90.25	0.00	0.00	0.00	0.00	62.25	1.00
5	PCRRIST	2425.07	32.50	91.00	0.00	0.00	0.00	0.00	68.25	1.00
5	CCPB	2254.62	40.00	90.75	0.00	0.00	0.00	0.00	65.50	1.00
6	TRACY	1498.63	32.00	89.25	0.00	0.00	0.00	0.00	51.00	1.00
13	HARDEE	1479.05	42.50	97.75	0.00	0.00	0.00	0.00	62.00	1.00
13	WILLIAMS	1302.76	28.00	89.50	0.00	0.00	0.00	0.00	39.00	1.00
12	WOODWORTH	867.67	32.00	90.25	0.00	0.00	0.00	0.00	44.00	1.00
11	CLARK 63	738.90	28.25	91.75	0.00	0.00	0.00	0.00	66.28	1.13
GRAND MEAN		2245.31	33.87	92.70	0.00	0.00	0.00	0.00	2.78	0.00
STANDARD ERROR OF A VARIETY MEAN		297.98	0.32	0.91	0.00	0.00	0.00	0.00	8.38	0.00
COEFFICIENT OF VARIATION		26.54%	1.90%	1.95%	0.00%	0.00%	0.00%	0.00%	7.93	0.00
5% ISI VARIETY MEANS (*****=NS)		850.46	0.52	2.58	0.00	0.00	0.00	0.00		
C O R R E L A T I O N S										
(+ - PROE=.05      +- - PEGE=.01)										
YIELD	KG/HA	1.00	0.21	0.13	0.00	0.00	0.00	0.00	0.66++	0.20
DAYS TC	FLOWER	0.21	1.00	0.51++	0.00	0.00	0.00	0.00	0.45++	0.48++
DAYS TO	MATURITY	0.13	0.51++	1.00	0.00	0.00	0.00	0.00	0.15	0.65++
NODULE	NUMBER 1	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE	NUMBER 2	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE	WEIGHT 1	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE	WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	0.66++	0.45++	0.00	0.00	0.00	0.00	0.00	1.00	0.47++
LODGING		0.20	0.48++	0.15	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.65++	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.75++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.13	0.05	-0.04	0.00	0.00	0.00	0.00	0.52++	0.16
100 SEED	WEIGHT	0.24	0.50++	0.36++	0.00	0.00	0.00	0.00	0.27+	0.22
QUALITY	OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.25
									0.00	0.00

TABLE 195 EXPERIMENT 387 YEAR 1975 (CONTINUED)

ENTRY NUMBER	VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	JUPITER	1.00	138.25	39.50	20.00	0.00
15	SEMMES	1.00	148.25	26.00	18.75	0.00
14	CALLAND	1.00	136.50	29.50	19.00	0.00
7	DAVIS	1.00	124.75	24.25	19.75	0.00
6	BCSSIER	1.00	113.75	38.25	17.75	0.00
4	IMPROVED PELICAN	1.00	143.25	32.00	16.00	0.00
2	HAMPTON 266A	1.00	141.75	26.50	22.25	0.00
10	CCIUNEUS	1.00	137.25	23.00	17.75	0.00
9	FORREST	1.00	117.00	36.00	16.00	0.00
5	CCBB	1.00	107.00	29.75	18.25	0.00
8	TRACY	1.00	121.00	20.50	16.75	0.00
3	HARDEE	1.00	51.50	43.50	21.75	0.00
13	WILLIAMS	1.00	75.75	29.00	15.25	0.00
12	WOODWORTH	1.00	82.75	27.25	18.00	0.00
11	CIARK 63	1.00	28.75	28.25	17.00	0.00
GRAND MEAN						
			111.17	30.28	18.28	0.00
STANDARD ERROR OF A VARIETY MEAN			14.37	4.21	0.53	0.00
COEFFICIENT OF VARIATION			25.85%	27.82%	5.83%	0.00%
5% ISI VARIETY MEANS (*****=NS)			41.00	12.02	1.52	0.00
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	0.00	0.75++	0.13	0.24	0.00
DAYS TO FLOWER		0.00	0.35	0.50++	0.21	0.00
DAYS TO MATURITY		0.00	-0.04	0.36++	0.16	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
PLANT	LEADING	0.00	0.52++	0.27+	-0.04	0.00
SHATTER		0.00	0.16	0.22	-0.25	0.00
PODS PER PLANT		1.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	1.00	-0.15	0.03	0.00
QUALITY OF SEED		0.00	-0.15	1.00	0.22	0.00
QUALITY OF SEED		0.00	0.00	0.22	1.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00







